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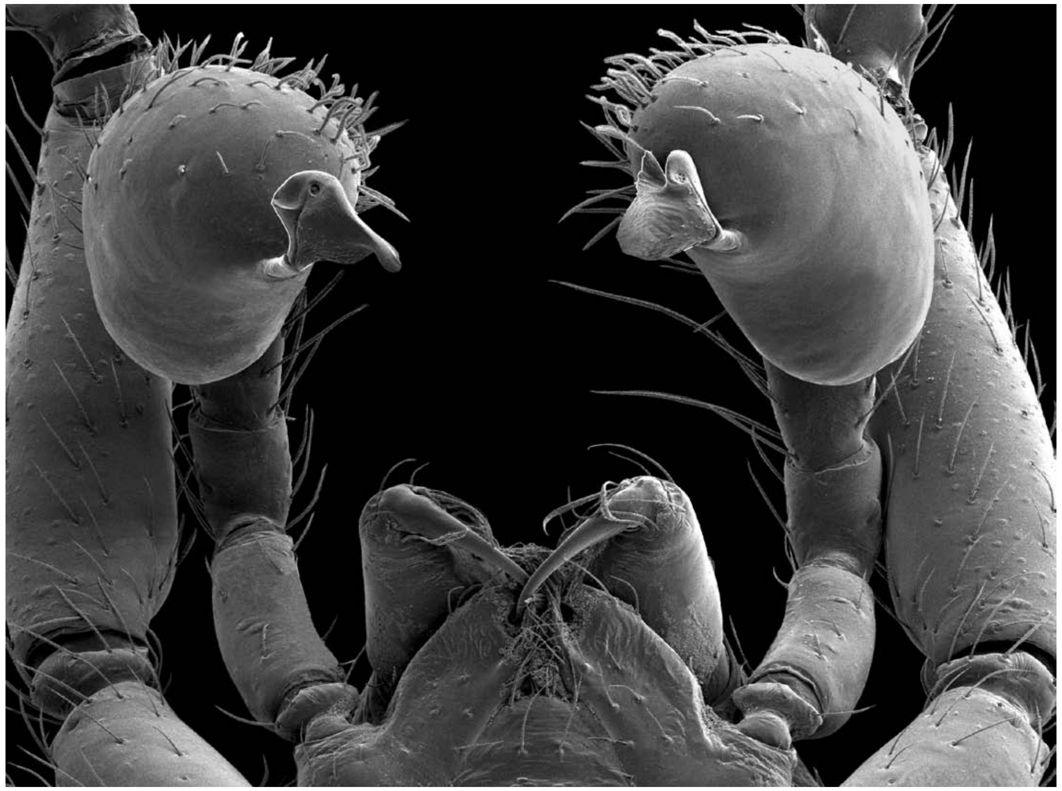
On the cover: *Paradysderina carrizal*, NEW SPECIES, MALE, SHOWING THE ASYMMETRY BETWEEN THE LEFT AND RIGHT EMBOLUS.

PLATNICK & DUPÉRRÉ: *PARADYSDERINA* AND *SEMIDYSDERINA*   AMNH BULLETIN 364   2011

THE ANDEAN GOBLIN SPIDERS OF THE NEW GENERA *PARADYSDERINA* AND *SEMIDYSDERINA* (ARANEAE, OONOPIDAE)

NORMAN I. PLATNICK AND NADINE DUPÉRRÉ



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THE ANDEAN GOBLIN SPIDERS OF THE NEW GENERA *PARADYSDERINA* AND *SEMIDYSDERINA* (ARANEAE, OONOPIDAE)

NORMAN I. PLATNICK

Division of Invertebrate Zoology
American Museum of Natural History

NADINE DUPÉRRÉ

Division of Invertebrate Zoology
American Museum of Natural History

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ABSTRACT

A new genus, *Paradysderina*, is established for a speciose group of Andean goblin spiders belonging to the *Dysderina* complex. Members of *Paradysderina* resemble those of *Scaphidysderina* Platnick and Dupérré in having the dorsal abdominal scutum of females either greatly reduced or entirely absent, but lack the highly crenulated sternum characteristic of *Scaphidysderina* and have instead a distinctively flattened, rugose sternal surface. Males of various species of *Paradysderina* show a wide range of remarkable autapomorphies, including projections at the sides of the clypeus and various kinds of excavations and projections on or between the chelicerae. Several species share the highly unusual occurrence of asymmetry between the left and right male pedipalps; in some species the asymmetry involves the size of the palpal bulb, but in those and other cases, the embolus structure also differs consistently between the two sides, to such an extent that if the left and right palps were studied in isolation, they would be considered to belong to different species. *Dysderina globosa* (Keyserling) from Colombia and *D. montana* (Keyserling) from Peru are transferred to *Paradysderina*, and their males are described for the first time. A total of 52 new species are described, including 26 from Peru (*P. watrousi*, *P. consuelo*, *P. excavata*, *P. silvae*, *P. malkini*, *P. maldonado*, *P. asymmetrica*, *P. apurimac*, *P. convencion*, *P. macho*, *P. tambopata*, *P. schizo*, *P. wygodzinskyi*, *P. newtoni*, *P. thayerae*, *P. carpish*, *P. rothae*, *P. tabaconas*, *P. sauce*, *P. piura*, *P. tambo*, *P. fatima*, *P. bagua*, *P. yasua*, *P. loreto*, and *P. pithecia*), 15 from Ecuador (*P. zamora*, *P. lostayos*, *P. puyo*, *P. hermani*, *P. yanayacu*, *P. baehrae*, *P. righty*, *P. centro*, *P. fusiscuta*, *P. lefty*, *P. vlad*, *P. yasuni*, *P. dracula*, *P. pecki*, and *P. sucumbios*), and 11 from Colombia (*P. imir*, *P. pinzoni*, *P. leticia*, *P. pira*, *P. vaupes*, *P. huila*, *P. chingaza*, *P. boyaca*, *P. carrizal*, *P. monstrosa*, and *P. chinacota*); *P. loreto* is also recorded from far western Amazonas, Brazil. A second new genus, *Semidysderina*, is established for species that share with *Scaphidysderina* and *Paradysderina* the absence of a dorsal scutum in females and a spinneret scutum in both sexes, but differ in having a groove connecting the posterior spiracles. Six new species of *Semidysderina* are described from Colombia (*S. lagila*, *S. kochalkai*, *S. donachui*, *S. marta*, *S. mulleri*, and *S. sturmi*). At least four of these species, from the Sierra Nevada de Santa Marta, are remarkable for the retention of a distinct seam between the male palpal cymbium and bulb.

INTRODUCTION

The present paper is the third in a series devoted to the *Dysderina* complex, a large and diverse assemblage of heavily scutate, long-spined gamasomorphines that represents a significant fraction of the total Neotropical oonopid fauna. It completes our coverage of those members of the complex in which the dorsal scutum on the abdomen of females is (rarely) greatly reduced or (much more commonly) completely absent. Species with such unarmed females abound in the Andean nations (Peru, Ecuador, and Colombia), and at least one species also extends into far western Amazonas, Brazil.

Two new genera are described here; one (*Paradysderina*) is highly speciose, and found throughout the northern Andes, whereas the other (*Semidysderina*) contains just a few species and is known only from Colombia. Both genera include some remarkable taxa. *Paradysderina* includes a number of species notable for the highly unusual occurrence of asymmetrical male pedipalps. Several of these species resemble those of some members of *Escaphiella* Platnick and Dupérré (2009b), in that either the right or left palp may be significantly less "inflated" than its counterpart. Such differences occur in *P. asymmetrica*, *P. tambopata*, *P. schizo*, *P. righty*, *P. fusiscuta*, and *P. lefty* (see figs. 144–151, 202–207, 218–223, 482–489, 516–521, 532–537). The differences are not confined, however, to just the degree to which the bulb is enlarged; even the embolar structure differs between the right and left palps (e.g., figs. 144, 145; 200, 201; 482, 486; 514, 515).

In the four most northern species of *Paradysderina*, from central and northern Colombia (*P. boyaca*, *P. carrizal*, *P. monstrosa*, and *P. chinacota*), there are no significant differences in the size or shape of the right and left bulbs, but the actual intromittent organ (the embolus) nevertheless has consistently different shapes on the left and right palps (see the photograph on the cover, and also figs. 689–696, 713–720, 725–732, 736–741). In these cases, as well, the differences between the left and right embolus are fully as extensive as those normally found between different species!

Almost all the species treated below show no trace of a dorsal abdominal scutum in females. The single exception is *P. fusiscuta*, from Ecuador, in which the epigastric scutum of females extends backward across the anterior surface of the abdominal dorsum (figs. 522, 523). It is, of course, possible that this represents an autapomorphic modification of the epigastric scutum. However, it may instead be the result of a fusion of the epigastric and dorsal scuta that may have occurred, phylogenetically, as one stage in the reduction and subsequent loss of the dorsal scutum. Such a process has evidently occurred in other oonopids. In the genus *Niarchos* Platnick and Dupérré (2010), males of most species have a fully developed dorsal scutum, but in males of two species, the dorsal scutum is represented only by a narrow, longitudinal, sclerotized strip covering just the cardiac area of the abdomen (Platnick and Dupérré, 2010: figs. 407, 430). In those males, the anterior end of the narrow strip is fully fused to the epigastric scutum. The reduction in size of the anterior scutum, and the fusion with the epigastric scutum, are clearly independent characters, however, as in the hypothesized sister genus of *Niarchos*, *Scaphios* Platnick and Dupérré (2010), males of the one species that have a similarly reduced dorsal scutum nevertheless have that scutum entirely separate from the epigastric scutum (Platnick and Dupérré, 2010: fig. 867).

As in the other Andean genus including species with a reduced or absent dorsal scutum in females, *Scaphidysderina* Platnick and Dupérré (2011), males can show some bizarre modifications of the clypeus and chelicerae. In one group of four species (*P. vlad* from Ecuador and *P. imir*, *P. pinzoni*, and *P. vaupes* from Colombia), the clypeus of males bears a pair of sharply pointed, anteriorly directed projections (figs. 545, 604, 609, 610, 643, 644). In *P. dracula*, from a lowland site in Amazonian Ecuador, the male chelicerae bear long, fanglike anterior projections (figs. 566, 567). In species like *P. excavata* and *P. maldonado* from Peru, the male chelicerae are medially excavated and bear sclerotized projections (figs. 101, 135) similar to those found in some *Scaphidysderina* males. Even odder are species like *P. yasua*, *P. imir*, and *P. chingaza* that have projections originating from the soft cuticle separating the chelicerae (figs. 371, 604, 665).

Most *Paradysderina* specimens have a relatively unmodified sternum that is basically flat, except for the radial grooves between the leg coxae, with a finely rugose surface (as in figs. 15, 57), and little apparent sexual dimorphism. However, in two species, *P. fusiscuta* and its likely sister species, *P. centro*, the sternal surface is variable; some specimens have fairly typical sculpturing (fig. 512), whereas others (usually, but not always, males) have the rugosity emphasized (fig. 513), and thus resemble some species of *Scaphidysderina*, although the elevated ridges are both smaller and weaker than in *Scaphidysderina* (cf. Platnick and Dupérré, 2011: figs. 116, 139). A few specimens of these two species even show some coalescence of the rugosity into weak transverse ridges reminiscent of those of *Dysderina* (cf. Platnick and Dupérré, 2011: fig. 3). It is conceivable that these two species are aberrant members of *Scaphidysderina*, but the occurrence of palpal asymmetry in *P. fusiscuta* suggests that the sternal variation has been independently acquired, and that these two species are best placed in *Paradysderina*.

Another species, *Paradysderina loreto*, shows a different kind of sternal modification, with more distinct elevations accompanying the radial grooves at the sides of the sternum (figs. 379, 402). In this case, those sternal modifications resemble those of a different set of species belonging to the *Dysderina* complex. Those species are common both in the Andes and elsewhere in northern South America; two of them were placed by Dumitrescu and Georgescu (1987) in their genus *Prodysderina*. However, all the specimens of that group that we have examined to date have a strong dorsal scutum on the abdomen of females that does not occur in *P. loreto*, and they typically have the postepigastric scutum of females separate from the epigastric scutum (in *P. loreto*, those two scuta are fused). Here again, *P. loreto* therefore seems best placed in *Paradysderina*, despite its somewhat aberrant sternal sculpturing.

Most of the species recorded below have been taken from forest litter, and seem to have the relatively small distribution ranges characteristic of litter-dwelling oonopids. However, at least three species from Peru have been taken by canopy fogging (*P. bagua*, *P. loreto*, and *P. pithecia*), and at least the first two of those species seem to have significantly broader ranges. Unlike the Andean endemics, which occur at elevations as high as 3370 m, at least one of these lowland Amazonian taxa, *P. loreto,* extends into western Brazil, and we would not be surprised if that were the case also for the other canopy-dwelling species.

Males of the species here assigned to the new genus *Semidysderina* have unusual palps. In four species, all from the Sierra Nevada de Santa Marta in northern Colombia, a seam is still present between the palpal cymbium and bulb, at least on the prolateral side of the bulb (figs. 818, 831). So far as we have observed to date, these are the only members of the *Dysderina* complex to retain that seam. Under scanning electron microscopy, the seam appears as a depression, with tiny, periodic pores along the depressed line (fig. 750). We suspect that the unknown male of *S. marta*, from the same mountain range, will also have the seam, but it apparently does not occur in the males of the sixth species we assign to the genus, *S. sturmi* from central Colombia. The palpal bulb of that species is not greatly inflated, and the embolus is very different from that of the northern species, but has a similarly narrow, sharply pointed basal projection (cf. figs. 752, 864). We suspect that additional species (and possibly even additional species groups) of *Semidysderina* remain to be discovered in Colombia.

Our methods follow those of Platnick and Dupérré (2009a, 2009b); because *Paradysderina* is so speciose, its species are treated geographically, beginning in southern Peru and proceeding northward, and separate keys are provided to the species of Peru, Ecuador, and Colombia. Only differences from the males (beyond the obvious lack of male cheliceral and endite modifications) are mentioned in the descriptions of females. Scans were taken from uncoated right male palps, and the images were flipped for consistency. All measurements are in mm. High-resolution, full-color versions of the images, many additional images, the geocoded locality data, and a distribution map for each species will be available on the goblin spider Planetary Biodiversity Inventory (PBI) project's website (http://research.amnh.org/oonopidae).

COLLECTIONS EXAMINED

AMNH	American Museum of Natural History, New York, NY
BMNH	Natural History Museum, London, England
CAS	California Academy of Sciences, San Francisco, CA
FMNH	Field Museum of Natural History, Chicago, IL
IAVH	Instituto Alexander von Humboldt, Bogotá, Colombia
ICN	Instituto de Ciencias Naturales, Universidad Nacional, Bogotá, Colombia
KBIN	Koninklijk Belgisch Instituut voor Natuurwetenschappen, Brussels, Belgium
MACN	Museo Argentino de Ciencias Naturales, Buenos Aires, Argentina
MELM	Museo de Entomología, Universidad Nacional Agraria, La Molina, Peru
MHNG	Muséum d'Histoire Naturelle, Geneva, Switzerland
MUSM	Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima, Peru
QCAZ	Museum of Invertebrates, Pontificia Universidad Católica, Quito, Ecuador
USNM	National Museum of Natural History, Smithsonian Institution, Washington, DC

Paradysderina, new genus

TYPE SPECIES: *Paradysderina watrousi*, new species.

ETYMOLOGY: The generic name refers to the similarities to *Dysderina* and is feminine in gender.

DIAGNOSIS: Members of this genus resemble those of *Scaphidysderina* and *Semidysderina* (and differ from all other members of the *Dysderina* complex) in having the dorsal scutum of females either greatly reduced (in the case of *P. fusiscuta*, fig. 522) or entirely absent. They differ from those of *Scaphidysderina* by having the sternal surface flat, rather than highly crenulated, and from those of *Semidysderina* in lacking a groove connecting the posterior spiracles. The male embolus varies greatly among species, but the female genitalia resemble those of *Semidysderina* in having a distinctive, elevated anterior ridge at the front of the genital atrium (fig. 82).

DESCRIPTION: Total length of males 1.3–2.3, of females 1.4–2.7. Coloration typically carapace orange-brown, without pattern; sternum and mouthparts orange, sternum without pattern; abdominal scuta orange, abdominal soft portions white, without pattern; legs yellow, without pattern (exceptions mentioned in species diagnoses). **Cephalothorax:** Carapace broadly oval in dorsal view (figs. 1, 41), anteriorly narrowed to between 0.5 and 0.75 times its maximum width, pars cephalica strongly elevated in lateral view (figs. 2, 42), anterolateral corners without extension or projections, pars thoracica with rounded posterolateral corners, without depressions or radiating rows of pits, posterolateral edge without pits, posterior margin not bulging below posterior rim, posterolateral surface without spikes; elevated portion of pars cephalica granulate (but granules sometimes very low, producing reticulate appearance under light microscopy, noted as "appears reticulate" in species descriptions), sides strongly granulate; fovea absent, lateral margin straight, rebordered, without denticles projecting past lateral margin in dorsal view; plumose setae near posterior margin of pars thoracica absent; nonmarginal pars cephalica and pars thoracica setae light, needlelike, scattered; marginal setae light, needlelike. Clypeus margin strongly rebordered, sinuous in front view (figs. 3, 43), vertical in lateral view, high, ALE separated from edge of carapace by their radius or more, median projection absent (except for fused chilum), some males with pair of anteriorly directed projections (figs. 545, 604, 609, 610, 643, 644); setae light, needlelike. Chilum undivided, fused to clypeus, with seam. Eyes six, well developed, all subequal, ALE oval, PME squared, PLE oval; posterior eye row slightly recurved from above, slightly procurved from front; ALE usually separated by their radius to diameter (rarely by their diameter or more), ALE-PLE separated by less than ALE radius, PME touching throughout most of their length, PLE-PME separated by less than PME radius. Sternum wider than long, not fused to carapace, surface flat rather than highly crenulated, median concavity and hair tufts absent, with radial furrows between coxae I–II, II–III, III–IV, furrows usually with tiny pits, rarely with tiny granules, radial furrow opposite coxae III absent; aside from furrows, surface finely rugose (figs. 15, 57), without pits, microsculpture present everywhere but front, sickle-shaped structures absent, anterior margin with continuous transverse groove, posterior margin extending posteriorly beyond anterior edges of coxae IV as single extension but without posterior hump, anterior corner unmodified, lateral margin with infracoxal grooves and anterior and posterior openings, distance between coxae approximately equal, extensions of precoxal triangles absent, lateral margins with bridges to coxae; setae sparse, dark, needlelike, densest laterally, originating from surface. Chelicerae slightly divergent (fig. 4), anterior face with swelling; males usually with one promarginal tooth, females usually with one promarginal and one retromarginal tooth (fig. 44); fang without toothlike projections, directed medially, shape normal, without prominent basal process, tip unmodified (figs. 5, 45); setae light, needlelike, densest medially; paturon inner margin with pairs of enlarged setae, distal region unmodified, posterior surface unmodified, anterior surface frequently with modifications in males, promargin with row of flattened setae, inner margin unmodified, laminate groove absent. Labium triangular, not fused to sternum (fig. 46), anterior margin indented at middle, same as sternum in sclerotization, with six or more setae on anterior margin, subdistal portion with unmodified setae. Endites same as sternum in sclerotization, those of males distally excavated, with separate ventral and dorsal processes (figs. 6, 7) anteriorly, posterior part unmodified; serrula present in single row in females (fig. 48), apparently reduced to two teeth in males, one situated at about one-third of length of median setal row, second situated more basally, near median margin of endite; proximalmost seta of row widened, without distal fringe (fig. 7). Labrum with triangular median protrusion (figs. 8, 47). Female palp without claw or spines (figs. 59, 60); patella without prolateral row of ridges; tibia with three trichobothria (fig. 61), tarsus unmodified. **Abdomen:** Ovoid, without long posterior extension, rounded posteriorly, interscutal membrane rows of small sclerotized platelets absent. Book lung covers large, ovoid, without setae, anterolateral edge unmodified; neither anterior nor posterior spiracles connected by groove (figs. 16, 63). Pedicel tube medium, ribbed, scutopedicel region unmodified, scutum extending far dorsal of pedicel, plumose hairs absent, matted setae on anterior ventral abdomen in pedicel area absent, cuticular outgrowths near pedicel absent. Dorsal scutum present in males, strongly sclerotized, not fused to epigastric scutum, middle surface smooth, sides smooth, anterior half without projecting denticles; dorsal scutum present in females only in *P. fusiscuta*, where small, fused to epigastric scutum (fig. 522). Epigastric scutum strongly sclerotized, surrounding pedicel, not protruding, small lateral sclerites absent, without lateral joints in females. Postepigastric scutum strongly sclerotized, anterior margin unmodified, with short posteriorly directed lateral apodemes; in males almost semicircular to elongated, extending to about three-fourths of abdomen length, fused to epigastric scutum, in females, short, often but not always fused to epigastric scutum. Spinneret scutum absent; supraanal scutum absent. Abdominal dorsal, epigastric, and postepigastric setae dark, needlelike; frontal epigastric area setae not thickened; dense patch of setae anterior to spinnerets absent; interscutal membrane with setae. Colulus present, tiny, with pair of setae. Anterior lateral spinnerets bisegmented, posterior medians unisegmented, posterior laterals bisegmented (figs. 33, 37); spigots scanned only in *P. watrousi*, anterior laterals with one major ampullate gland spigot plus four piriform gland spigots in both male (fig. 34) and female (fig. 38); posterior medians with one minor ampullate gland spigot plus two aciniform gland spigots in male (fig. 35), six in female (fig. 39); posterior laterals with one minor ampullate gland spigot plus three aciniform gland spigots in male (fig. 36), 10 in female (fig. 40). **Legs:** Femur IV not thickened, same size as femora I–III, patella plus tibia I shorter than carapace, tibia I unmodified, tibia IV ventral scopula and specialized hairs on ventral apex absent, metatarsi I, II mesoapical comb absent, metatarsi III, IV ventral scopula absent. Leg spines present on femur I (and sometimes II); anterior tibiae and metatarsi with several pairs of very long spines (figs. 29, 30, 65, 66), legs III, IV without spines (figs. 31, 32). Tarsi without inferior claw. Superior claws with four or five large teeth on median and lateral surfaces (figs. 17–24, 49–56). Trichobothrial base with numerous parallel ridges (fig. 58). Tarsal organ with three sensillae on legs I, II (figs. 25, 26, 67, 68), two on legs III, IV, palp (figs. 14, 27, 28, 62, 69, 70). **Genitalia:** Male epigastric region with sperm pore small, oval, situated at level of posterior spiracles, rebordered, furrow without Ω-shaped insertions, without setae (fig. 16). Male palp of normal size, not strongly sclerotized, right and left palps sometimes asymmetrical, proximal segments pale orange, cymbium and bulb yellow; embolus dark, prolateral excavation absent, bifid, with elaborate projections; trochanter minute, unmodified; femur of normal size, two or more times as long as trochanter, without posteriorly rounded lateral dilation, attaching to patella basally; patella shorter than femur, not enlarged, without prolateral row of ridges, setae unmodified; tibia with three trichobothria (fig. 13); cymbium ovoid in dorsal view, completely fused with bulb, no seam visible (figs. 9, 10), not extending beyond distal tip of bulb, plumose setae absent, without stout setae or distal patch of setae; bulb elongated, 1–1.5 times as long as cymbium, stout, embolus highly variable, often ornamented with microsculpture (figs. 11, 12). Female genitalia with strong apodemes (fig. 71), atrium with elevated anterior ridge and rebordered posterior margin (fig. 64); anterior genitalic projection typically with fine, toothlike extensions (fig. 72).

DISTRIBUTION: Known only from the Andean nations (Peru, Ecuador, and Colombia), except that one species (*P. loreto*) extends from Amazonian Peru into far western Amazonas, Brazil; found on both slopes of the Andes, at a wide range of elevations (100–3367 m).

KEY TO SPECIES FROM PERU

1. Males (those of *fatima* unknown) 2
– Females (those of *excavata*, *maldonado*, *macho*, *schizo*, *rothae*, *sauce*, *tambo,* and *yasua* unknown) 27
2. Palps asymmetrical 3
– Palps symmetrical 5
3. Left embolus greatly widened at about half its length (fig. 147). . . . . *asymmetrica*
– Left embolus not greatly widened 4
4. Left embolus notched at about half its length (figs. 200, 203). . . . . *tambopata*
– Left embolus not notched (fig. 219) . . . *schizo*
5. Embolus about as wide distally as basally (as in figs. 163, 360) 6
– Embolus much wider distally than at base (as in figs. 179, 274) 14
6. Embolus long, narrow, translucent (figs. 124, 163) 7
– Embolus otherwise 8
7. Embolus sharply bent (fig. 124) . . . *malkini*
– Embolus not sharply bent (fig. 163) . . . *apurimac*
8. Embolus long, more than half of bulb length (figs. 231, 326) 9
– Embolus much shorter. 10
9. Embolus relatively narrow (fig. 326) . . . *sauce*
– Embolus relatively wide (fig. 231) . . . . *wygodzinskyi*
10. Embolus sharply bent distally (figs. 90, 104) 11
– Embolus not sharply bent distally. 12
11. Embolus with prolateral prong at about half its length (fig. 102) . . . . *excavata*
– Embolus with distal prong (fig. 88) *consuelo*
12. Embolus with subbasal prong (figs. 309, 311) . . . . *montana*
– Embolus without subbasal prong 13
13. Embolus distally twisted (figs. 345, 347) . . . . *tambo*
– Embolus not distally twisted (figs. 360, 362) . . . . *bagua*
14. Embolus deeply divided distally (as in figs. 111, 138, 297) 15
– Embolus not deeply divided distally 20
15. Embolus with two distal projections (as in figs. 138, 297) 16
– Embolus with three distal projections (as in figs. 111, 289) 18
16. Embolus directed prolaterally (fig. 297) . . . . *tabaconas*
– Embolus directed distally (figs. 77, 138). . 17
17. Embolus C-shaped in prolateral view (fig. 76) . . . . *watrousi*
– Embolus T-shaped in prolateral view (fig. 137) . . . . *maldonado*
18. Embolus as wide as distal part of palpal bulb (figs. 260, 289) 19
– Embolus narrower than distal part of palpal bulb (fig. 111). . . . . *silvae*
19. Embolar base with sharp prolateral process (fig. 260). . . . . *thayerae*
– Embolar base without sharp process (fig. 289) . . . . *rothae*
20. Embolus relatively small, with recurved tip (figs. 333, 391) 21
– Embolus larger, with expanded tip 22
21. Embolus relatively short (figs. 389, 391). . . *pithecia*
– Embolus longer (figs. 331, 333). . . . . . *piura*
22. Embolus relatively short, wide (figs. 192, 194) . . . . *macho*
– Embolus longer. 23
23. Embolus about twice as wide distally as basally (figs. 177, 179, 403, 405) 24
– Embolus distally wider. 25
24. Embolus width gradually increasing toward tip (figs. 177, 179) . . . . *convencion*
– Embolus abruptly increasing in width (figs. 403, 405) . . . . *loreto*
25. Embolus fan shaped (figs. 250, 252). . . *newtoni*
– Embolus not fan shaped 26
26. Embolus with retrolateral expansion (figs. 374, 376) . . . . *yasua*
– Embolus without retrolateral expansion (figs. 272, 274) . . . . *carpish*
27. Genitalic apodemes relatively short, each about one-fourth as long as transverse bar connecting the two apodemes (as in figs. 84, 157) 28
– Genitalic apodemes longer 34
28. Anterior genitalic process surrounded by long, wide sclerotization throughout its length (figs. 157, 186, 244, 304). 29
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– Anterior genitalic process otherwise 31
30. Transverse sclerotization situated at anterior atrial margin (fig. 186). . . . . *convencion*

– Transverse sclerotization situated anterior of anterior atrial margin (fig. 157). . . *asymmetrica*

31. Anterior genitalic process sclerotized only at tip (fig. 304) . . . . *tabaconas*

– Anterior genitalic process sclerotized throughout its length (fig. 244) . . . . . . *wygodzinskyi*

32. Atrium with conspicuous lateral sclerotizations (fig. 173) . . . . *apurimac*

– Atrium without such sclerotizations 33

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– Anterior genitalic process relatively long (fig. 84) . . . . *watrousi*

34. Apodemes greatly widened, triangular (fig. 340) . . . . *piura*

– Apodemes not widened 35

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– Apodemes directed obliquely 39

36. Apodemes longer than atrium (fig. 281) . . . . *carpish*

– Apodemes shorter than atrium 37

37. Apodemes with medially directed projections (fig. 398). *pithecia*

– Apodemes without medially directed projections 38

38. Atrium with triangular, paramedian sclerotizations (fig. 118) . . . . *silvae*

– Atrium without such sclerotizations (fig. 385) . . . . *loreto*

39. Anterior genitalic process with thumblike posterior sclerotization (fig. 213) . . . . . *tambopata*

– Anterior genitalic process otherwise 40

40. Tubular, median anterior genitalic process absent (figs. 97, 131) 41

– Tubular, median anterior genitalic process present 42

41. Apodemes relatively long (fig. 97) . . . *consuelo*

– Apodemes relatively short (fig. 131) . . . *malkini*

42. Anterior genitalic process with narrow, recurved tip (fig. 369) . . . . *bagua*

– Anterior genitalic process otherwise 43

43. Sclerotization around anterior genitalic process oval (fig. 356). . . . . *fatima*

– Sclerotization around anterior genitalic process triangular. 44

44. Apodemes and transverse bar forming M-shaped structure (fig. 318) . . . . . . *montana*

– Apodemes and transverse bar otherwise (fig. 267). . . . . *thayerae*

Paradysderina watrousi, new species

Figures 1–84

TYPES: Male holotype and female allotype taken from vine litter at Pillahuata, Manu Road, km 128, Cusco, Peru (Sept. 24, 1982; L. Watrous, G. Mazurek), deposited in FMNH (33584, PBI_OON 10091).

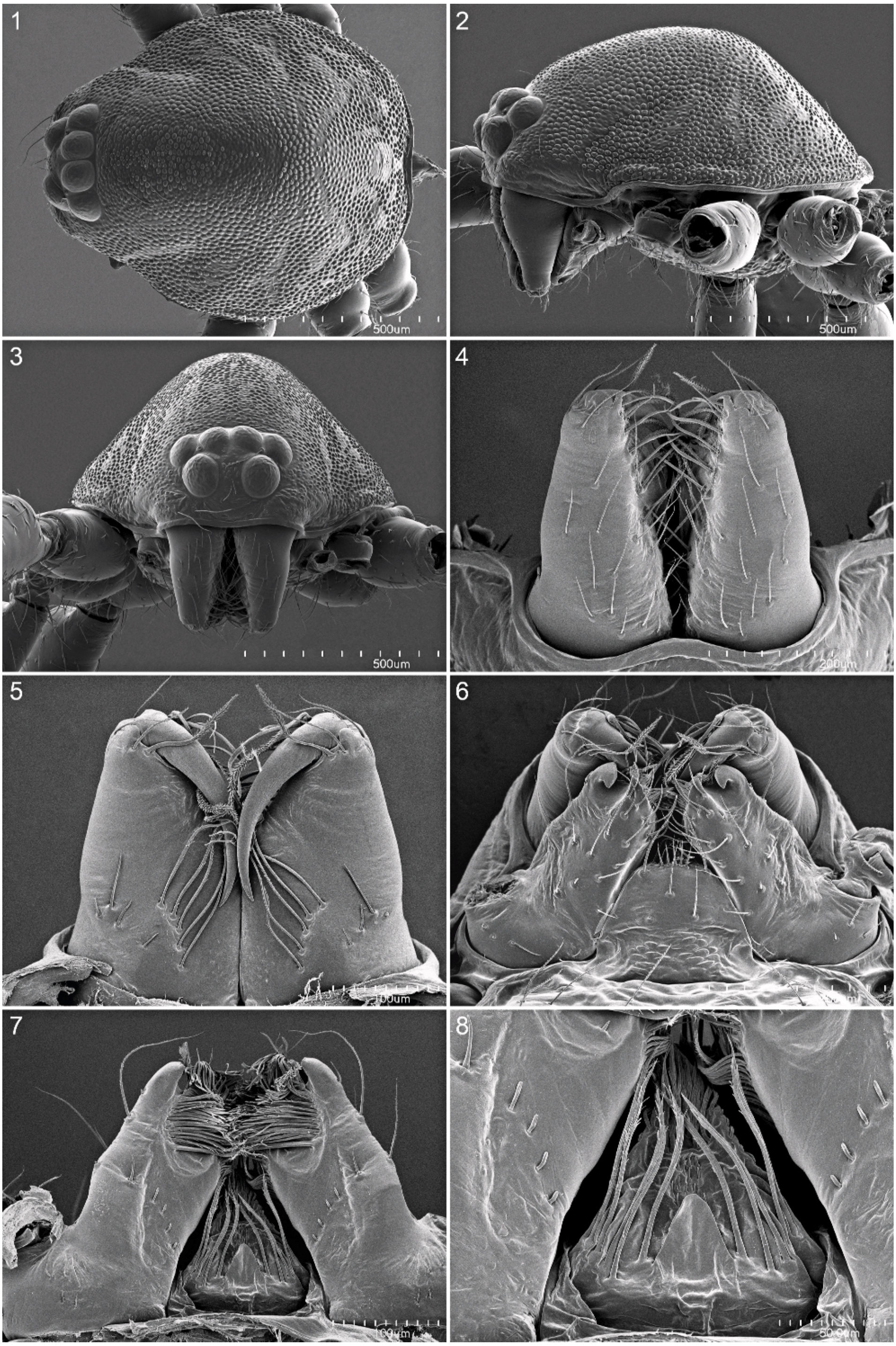
ETYMOLOGY: The specific name is a patronym in honor of one of the collectors of the types, Larry Watrous.

DIAGNOSIS: Males can be recognized by the sickle-shaped embolus, with a narrow dorsal and much wider ventral flange (figs. 9–12, 76–78), females by the rectangular genital atrium, with the anterior genitalic process extending far anterior of the anterior atrial ridge (figs. 82–84).

MALE (PBI_OON 10091, figs. 1–36, 73–78): Total length 1.78. Elevated portion of pars cephalica granulate. Chilum tiny, triangular. Inner margin of paturon slightly excavated. Endites anteriorly with two short, curved, clawlike processes. Leg spination: femora I p0-0-2; tibiae: I v4-4-1p, II v4-4-0; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus originating on strong lobe of cymbium, consisting of narrow basal stalk followed by bifid dorsal and ventral flanges forming sickle-shaped pair.

FEMALE (PBI_OON 10091, figs. 37–72, 79–84): Total length 2.08. Postepigastric scutum only around epigastric furrow, not fused to epigastric scutum. Leg spination: femora: I p0-0-2, II p0-0-1; tibiae: I v4-4-2, II v3-4-1; metatarsi: I v2-2-2, II v2-2-1p. Genital atrium rectangular; anterior genitalic process extending as far anterior of anterior atrial ridge as posterior of it; anterior genitalic process with W-shaped base.

OTHER MATERIAL EXAMINED: **Peru:** *Cusco:* Consuelo, Manu Road, km 165, Oct. 4, 1982, leaf litter (L. Watrous, G. Mazurek, FMNH 33576, PBI_OON 10083), 1♀; Pillahuata, Manu Road, km 128, Sept. 16, 1982, litter under ferns (L. Watrous, G. Mazurek, FMNH 33577, PBI_OON 10084), 1♀, Sept. 17, 1982, wood chips (L. Watrous, G. Mazurek, FMNH 33536, PBI_OON 10043), 1♀, Sept. 19, 2982, leaf litter after rain (L. Watrous, G. Mazurek, FMNH 33575, PBI_OON 10082), 1♀, Sept. 20, 1982, litter in mossy forest (L. Watrous, G. Mazurek, FMNH 33547, PBI_OON 10054), 1♂, 1♀, Sept. 21, 1982, litter after rain (L. Watrous, G. Mazurek, FMNH PBI_OON 523), 1♂, Sept. 25, 1982, vine litter (L. Watrous, G. Mazurek, FMNH 33557, PBI_OON 10064), 1♀, Sept. 26, 1982, litter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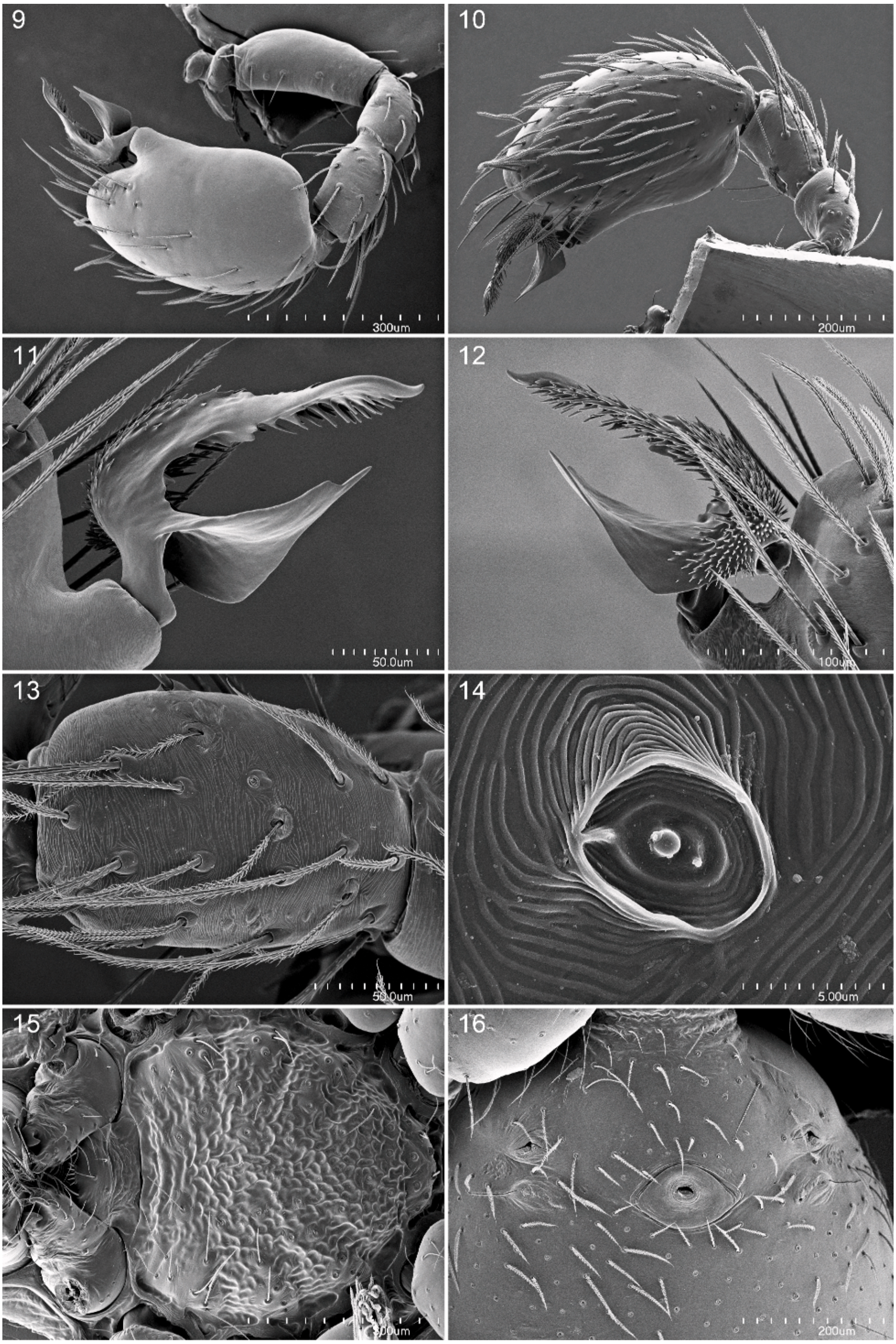
Figs. 1–8. *Paradysderina watrousi*, new species, male. **1.** Carapace, dorsal view. **2.** Same, lateral view. **3.** Same, anterior view. **4.** Chelicerae, anterior view. **5.** Same, posterior view. **6.** Mouthparts, ventral view. **7.** Labrum and endites, dorsal view. **8.** Labrum, dorsal view.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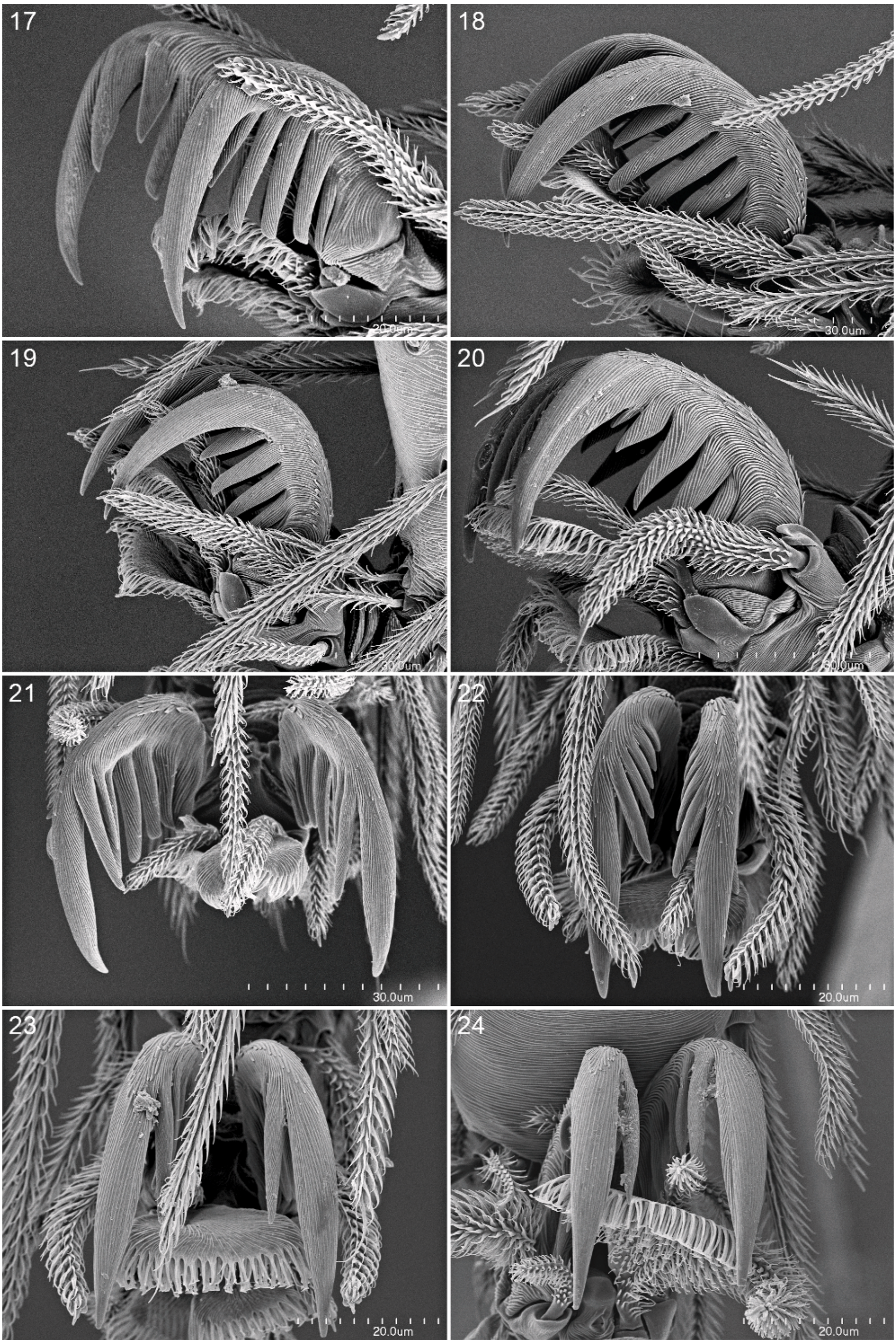
Figs. 9–16. *Paradysderina watrousi*, new species, male. **9.** Left palp, prolateral view. **10.** Same, retrolateral view. **11.** Left embolus, prolateral view. **12.** Same, retrolateral view. **13.** Palpal tibia, dorsal view. **14.** Tarsal organ, palp, dorsal view. **15.** Sternum and mouthparts, ventral view. **16.** Anterior portion of abdomen, ventral view.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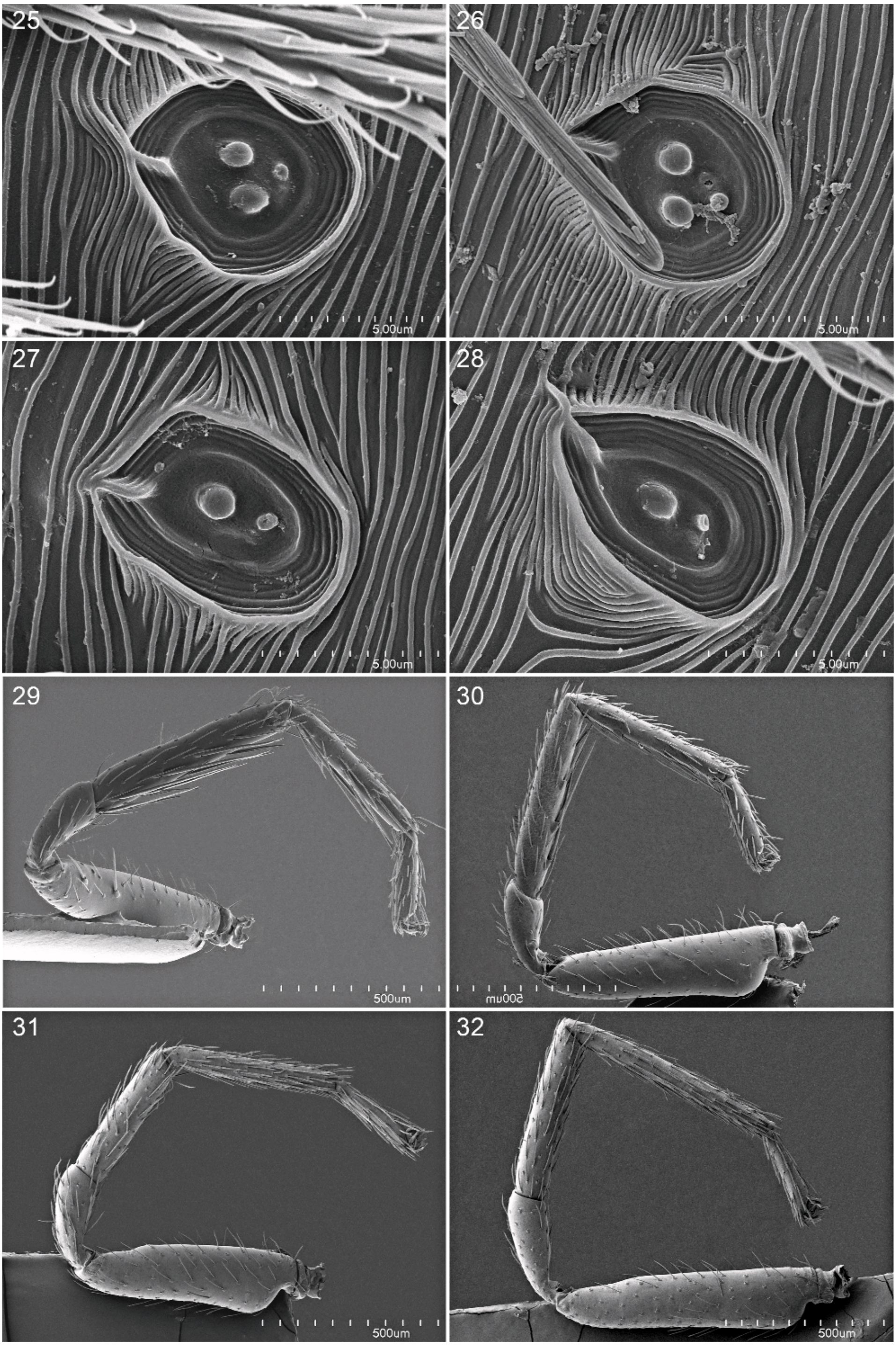
Figs 17–24. *Paradysderina watrousi*, new species, male. **17.** Claws of leg I, lateral view. **18.** Same, leg II. **19.** Same, leg III. **20.** Same, leg IV. **21.** Claws of leg I, apical view. **22.** Same, leg II. **23.** Same, leg III. **24.** Same, leg IV.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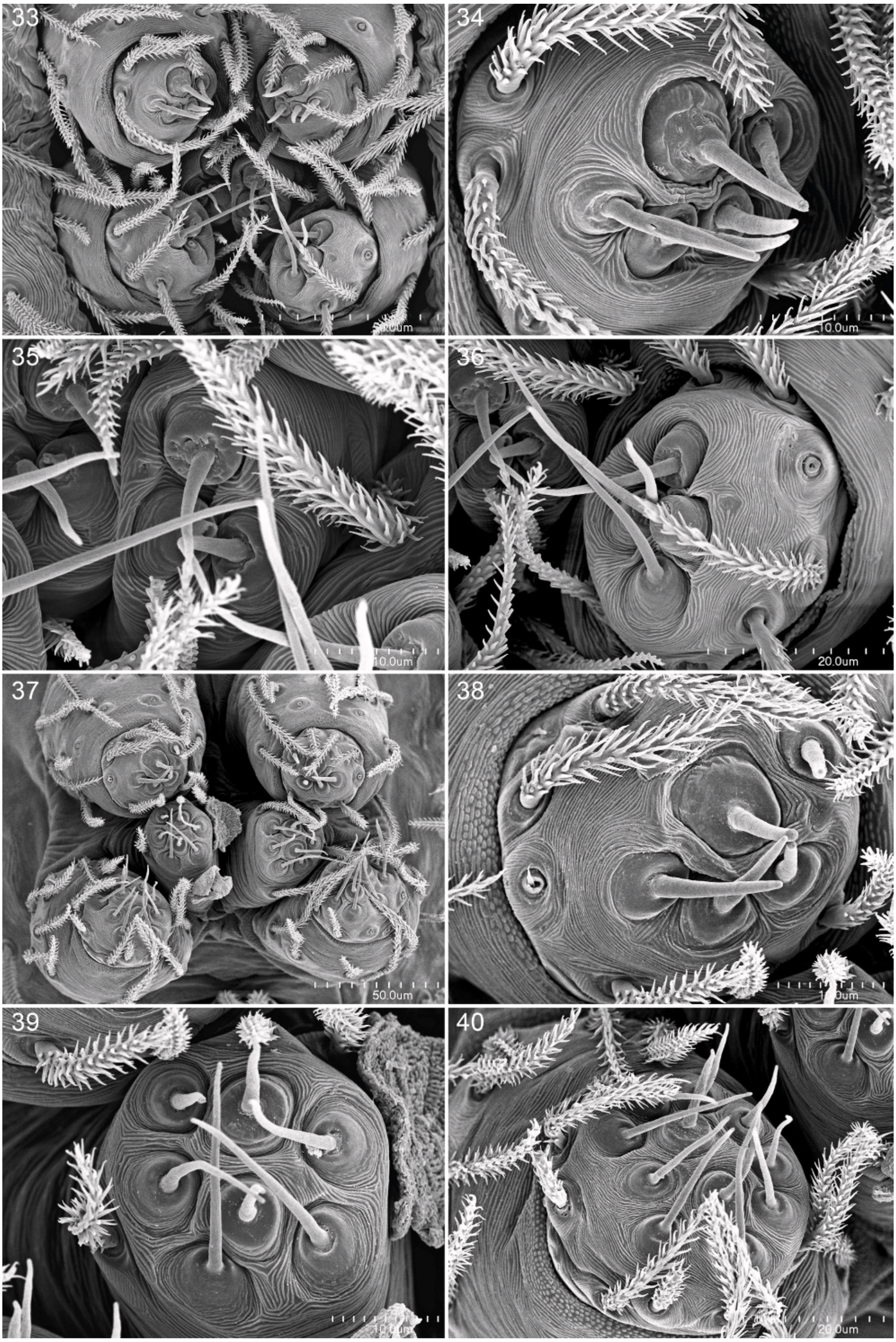
Figs. 25–32. *Paradysderina watrousi*, new species, male. **25.** Tarsal organ from leg I, dorsal view. **26.** Same, leg II. **27.** Same, leg III. **28.** Same, leg IV. **29.** Leg I, lateral view. **30.** Same, leg II. **31.** Same, leg III. **32.** Same, leg IV.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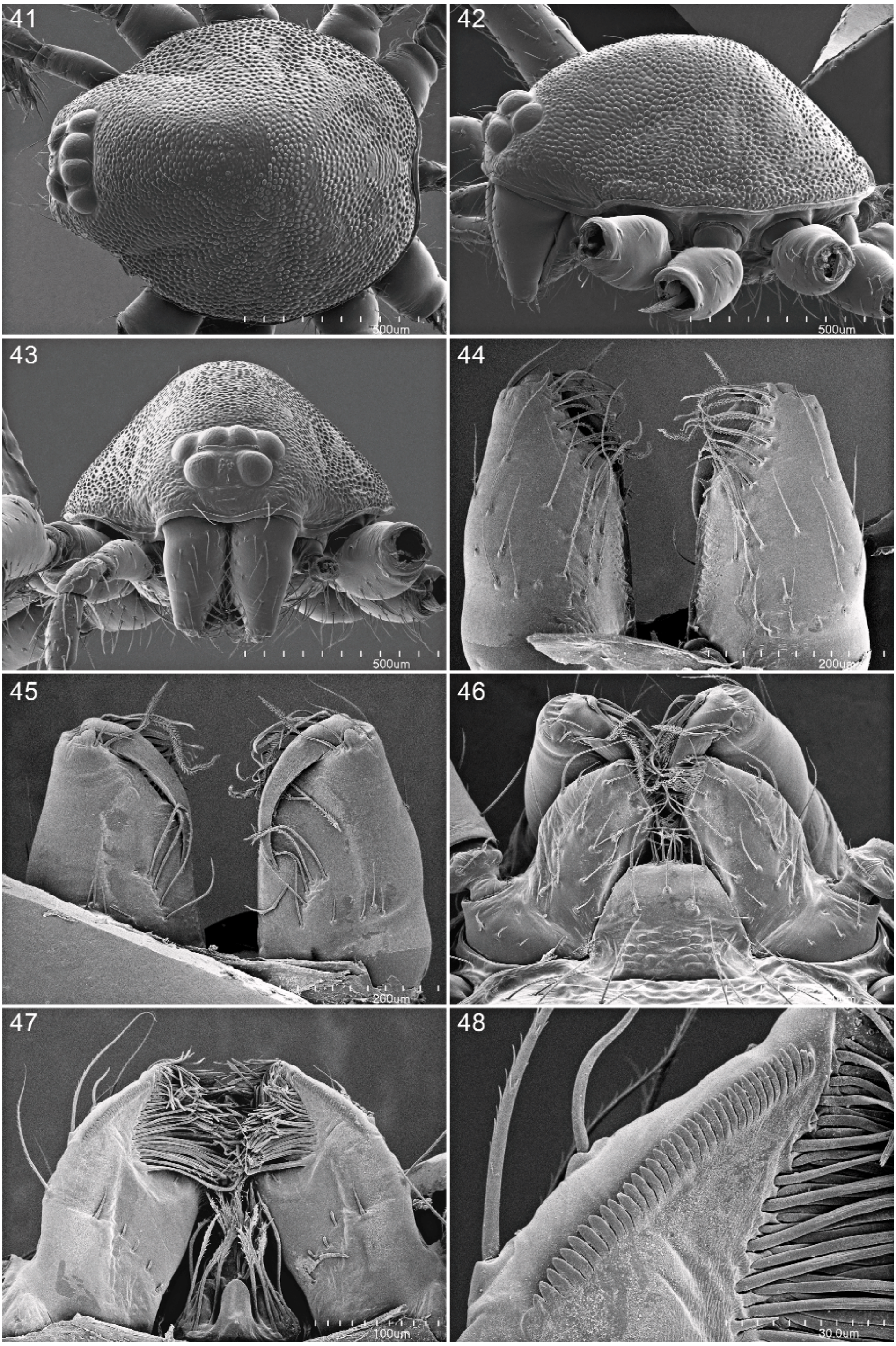
Figs. 33–40. *Paradysderina watrousi*, new species, male (33–36) and female (37–40). **33, 37.** Spinnerets, apical view. **34, 38.** Anterior lateral spinneret, apical view. **35, 39.** Posterior median spinneret, apical view. **36, 40.** Posterior lateral spinneret, apical view.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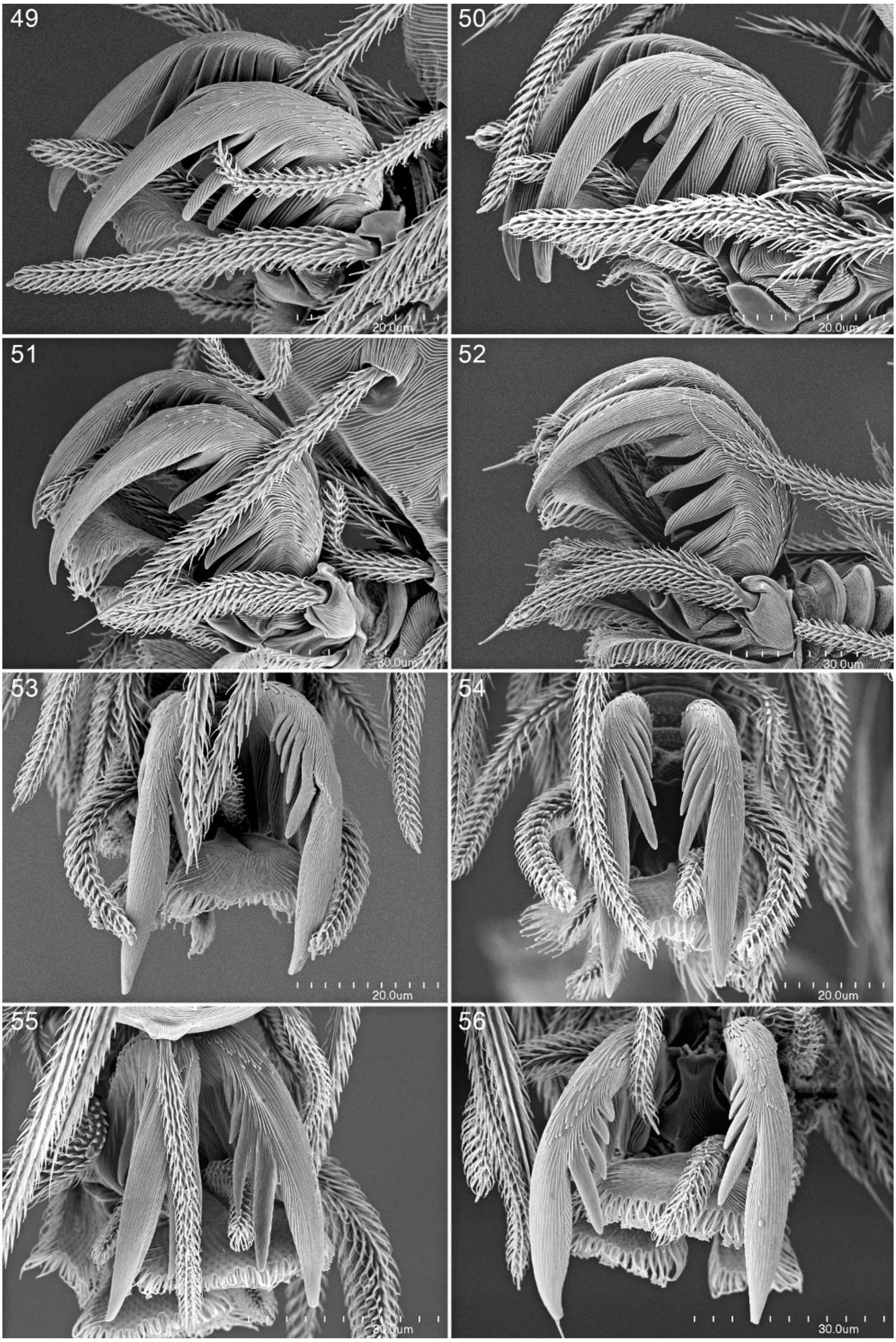
Figs. 41–48. *Paradysderina watrousi*, new species, female. **41.** Carapace, dorsal view. **42.** Same, lateral view. **43.** Same, anterior view. **44.** Chelicerae, anterior view. **45.** Same, posterior view. **46.** Mouthparts, ventral view. **47.** Labrum and endites, dorsal view. **48.** Serrula, dorsal view.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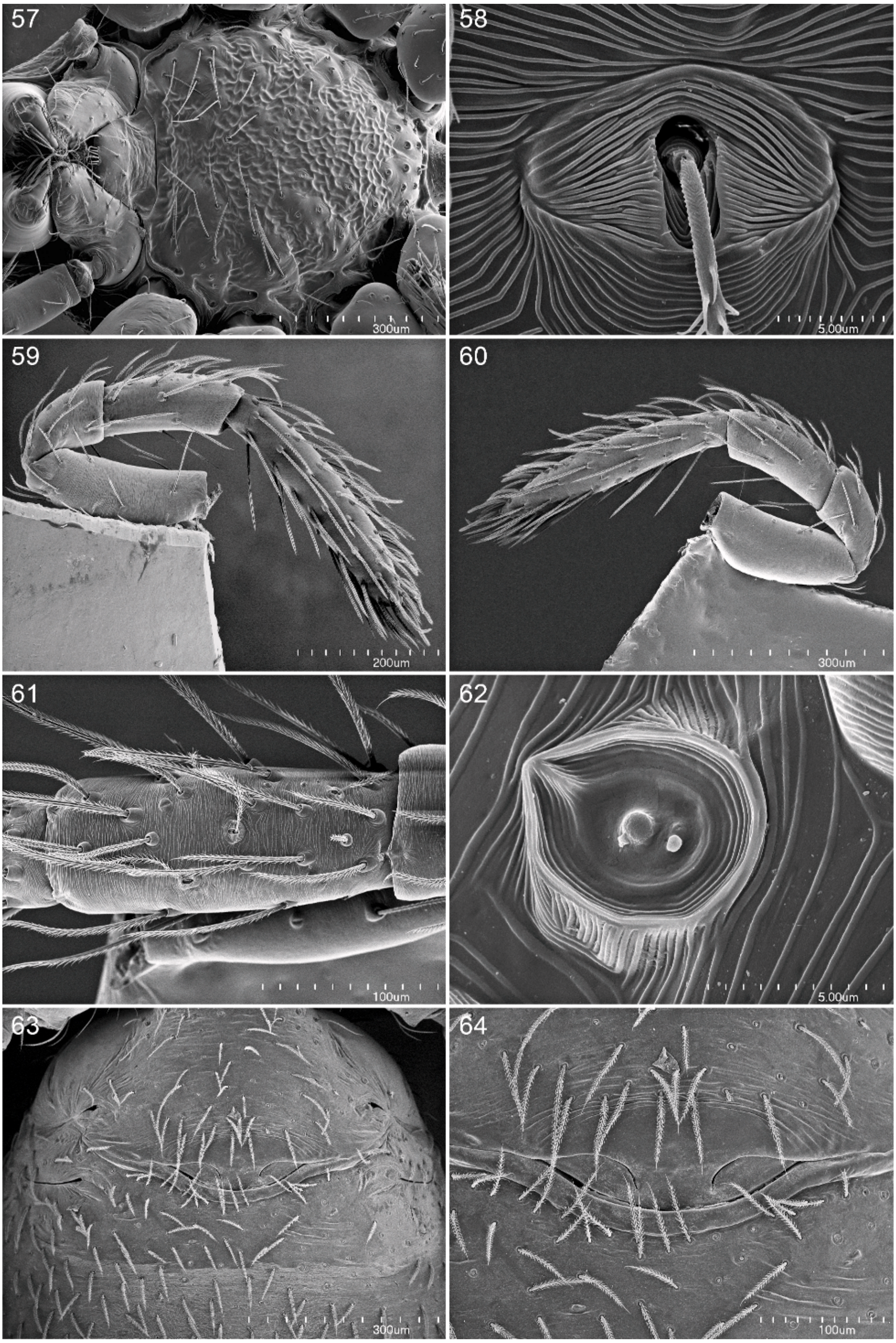
Figs. 49–56. *Paradysderina watrousi*, new species, female. **49.** Claws of leg I, lateral view. **50.** Same, leg II. **51.** Same, leg III. **52.** Same, leg IV. **53.** Claws of leg I, apical view. **54.** Same, leg II. **55.** Same, leg III. **56.** Same, leg IV.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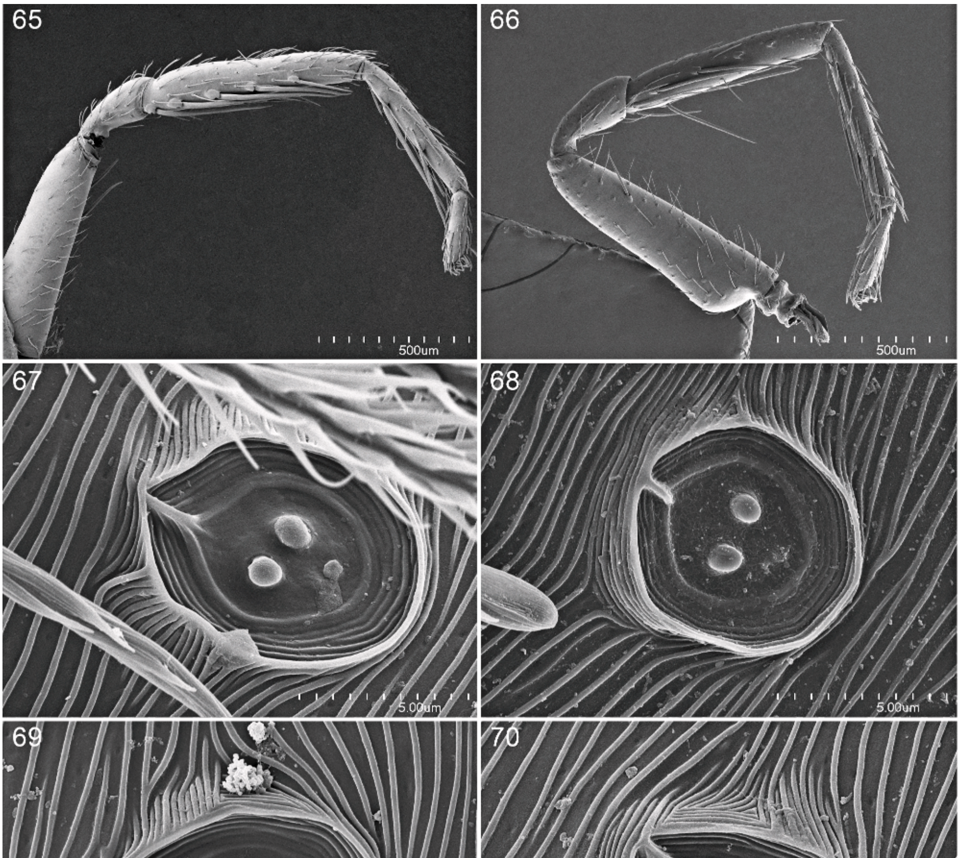
Figs. 57–64. *Paradysderina watrousi*, new species, female. **57.** Sternum and mouthparts, ventral view. **58.** Trichobothrial base from metatarsus III, dorsal view. **59.** Palp, prolateral view. **60.** Same, retrolateral view. **61.** Palpal tibia, dorsal view. **62.** Tarsal organ, palp, dorsal view. **63.** Anterior portion of abdomen, ventral view. **64.** Genitalia, ventral view.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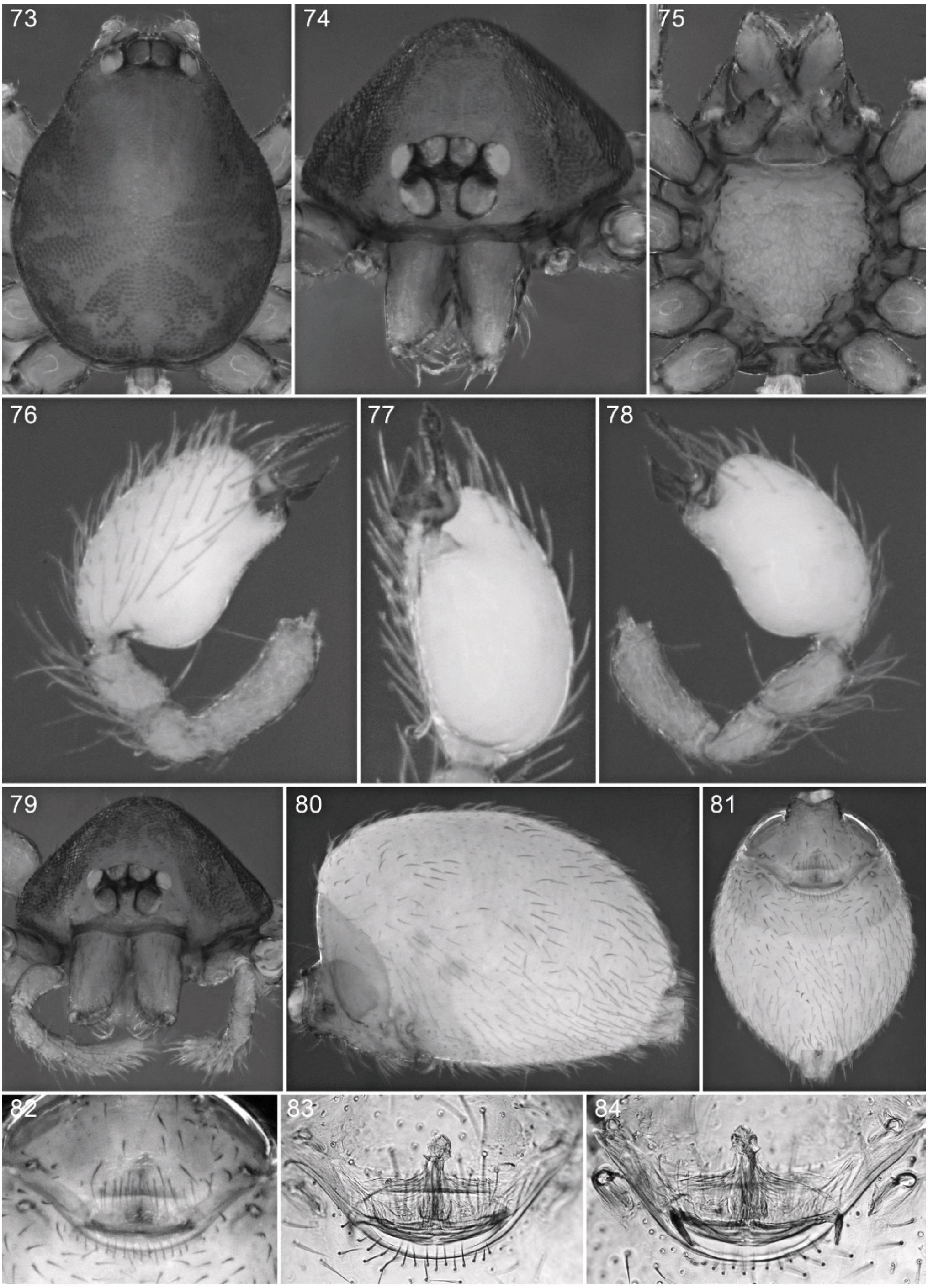
Figs. 65–72. *Paradysderina watrousi*, new species, female. **65.** Leg I, lateral view. **66.** Same, leg II. **67.** Tarsal organ from leg I, dorsal view. **68.** Same, leg II. **69.** Same, leg III. **70.** Same, leg IV. **71.** Spiracles and genitalia, dorsal view. **72.** Genitalia, dorsal view.



Figs. 73–84. *Paradysderina watrousi*, new species, male (73–78) and female (79–84). **73,** Carapace, dorsal view. **74, 79.** Same, anterior view. **75.** Sternum and mouthparts, ventral view. **76.** Left palp, prolateral view. **77.** Same, ventral view. **78.** Same, retrolateral view. **80.** Abdomen, lateral view. **81.** Same, ventral view. **82, 83.** Epigastric region, ventral view. **84.** Same, dorsal view.

along stream (L. Watrous, G. Mazurek, FMNH PBI_OON 38399), 3♂, same, litter along gravel streambed (L. Watrous, G. Mazurek, FMNH 33537, PBI_OON 10044), 1♂, same, moss and litter on xeric slope (L. Watrous, G. Mazurek, FMNH 33585, PBI_OON 10092), 1♂, 4♀, same, rotten logs (L. Watrous, G. Mazurek, FMNH 33539, PBI_OON 10046), 1♀, same, damp leaf litter (L. Watrous, G. Mazurek, FMNH 33591, PBI_OON 10098), 1♀, Sept. 27, 1982, vine litter (L. Watrous, G. Mazurek, FMNH 33545, PBI_OON 10052), 3♂, 1♀, same, litter in runoff in mossy forest (L. Watrous, G. Mazurek, FMNH 33595, PBI_OON 10102), 1♂, 2♀.

DISTRIBUTION: Peru (Cusco).

Paradysderina consuelo, new species
Figures 85–97

TYPES: Male holotype and female allotype taken under rotten palm at Consuelo, Manu Road, km 165, Cusco, Peru (Oct. 6, 1982; L. Watrous, G. Mazurek), deposited in FMNH (PBI_OON 38413).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males can be recognized by the short embolus, originating from an unsclerotized circle on the surface of the cymbium, with a weakly sclerotized, straight basal portion and a sharply hooked, distally bifid distal portion (figs. 88–91), females by the pentagonal sclerotization occupying most of the genital atrium (figs. 95–97).

MALE (PBI_OON 10093, figs. 85–91): Total length 1.34. Elevated portion of pars cephalica granulate. Chilum small triangular. Anterior ledge of paturon with slight tubercle on inner margin. Endites with wide, blunt ventral process, dorsal process narrow, sharply pointed. Leg spination: femora I p0-0-2; tibiae: I v4-4-2, II v4-4-0; metatarsi I, II v2-2-1p. Palps symmetrical; embolus small, hook shaped, only distal part heavily sclerotized.

FEMALE (PBI_OON 10093, figs. 92–97): Total length 1.52. Postepigastric scutum only around epigastric furrow, fused to epigastric scutum. Leg spination: femora: I p0-0-2, II p0-0-1; tibiae: I v4-4-2, II v4-4-1p; metatarsi I, II v2-2-1p. Most of genital atrium occupied by pentagonal sclerotization.

OTHER MATERIAL EXAMINED: **Peru:** *Cusco:* Consuelo, Manu Road, km 165, Oct. 1, 1982, litter under rotten palm (L. Watrous, G. Mazurek, FMNH 33540, PBI_OON 10047), 1♀, Oct. 2, 1982, litter under crown of felled tree (L. Watrous, G. Mazurek, FMNH 33563, PBI_OON 10070), 1♂, Oct. 5, 1982, litter along stream (L. Watrous, G. Mazurek, FMNH 33578, PBI_OON 10085), 1♂, same, rotten palm (L. Watrous, G. Mazurek, FMNH 33581, PBI_OON 10088), 1♂, Oct. 6, 1982, leaf litter (L. Watrous, G. Mazurek, FMNH 33555, PBI_OON 10062), 1♀, Oct. 7, 1982, exposed termite nest (L. Watrous, G. Mazurek, FMNH 33582, PBI_OON 10089), 1♂, Oct. 8, 1982, leaf litter (L. Watrous, G. Mazurek, FMNH 33579, PBI_OON 10086), 3♂, 1♀, Oct. 10, 1982, leaf litter (L. Watrous, G. Mazurek, FMNH 33551, PBI_OON 10058), 1♂, 3♀, Oct. 12, 1982, leaf litter (L. Watrous, G. Mazurek, FMNH 33549, 33552, 33562, PBI_OON 10056, 10059, 10069), 4♂, 2♀, Oct. 13, 1982, leaf litter (L. Watrous, G. Mazurek, FMNH 33586, PBI_OON 10093), 2♂, 2♀.

DISTRIBUTION: Peru (Cusco).

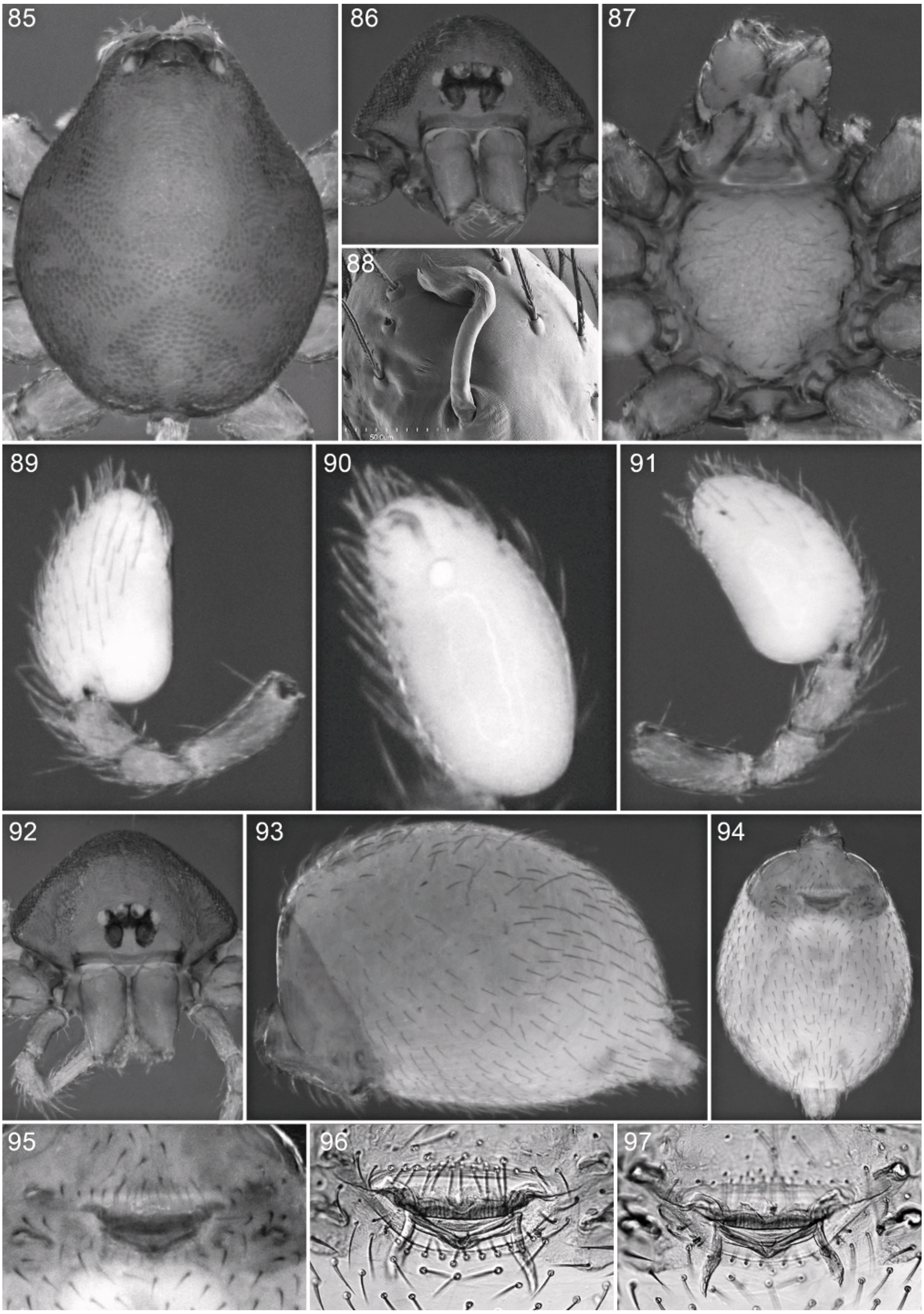
Paradysderina excavata, new species
Figures 98–105

TYPE: Male holotype taken from litter at rotten logs from Consuelo, Manu Road, km 165, Cusco, Peru (Oct. 1, 1982; L. Watrous, G. Mazurek), deposited in FMNH (PBI_OON 38412).

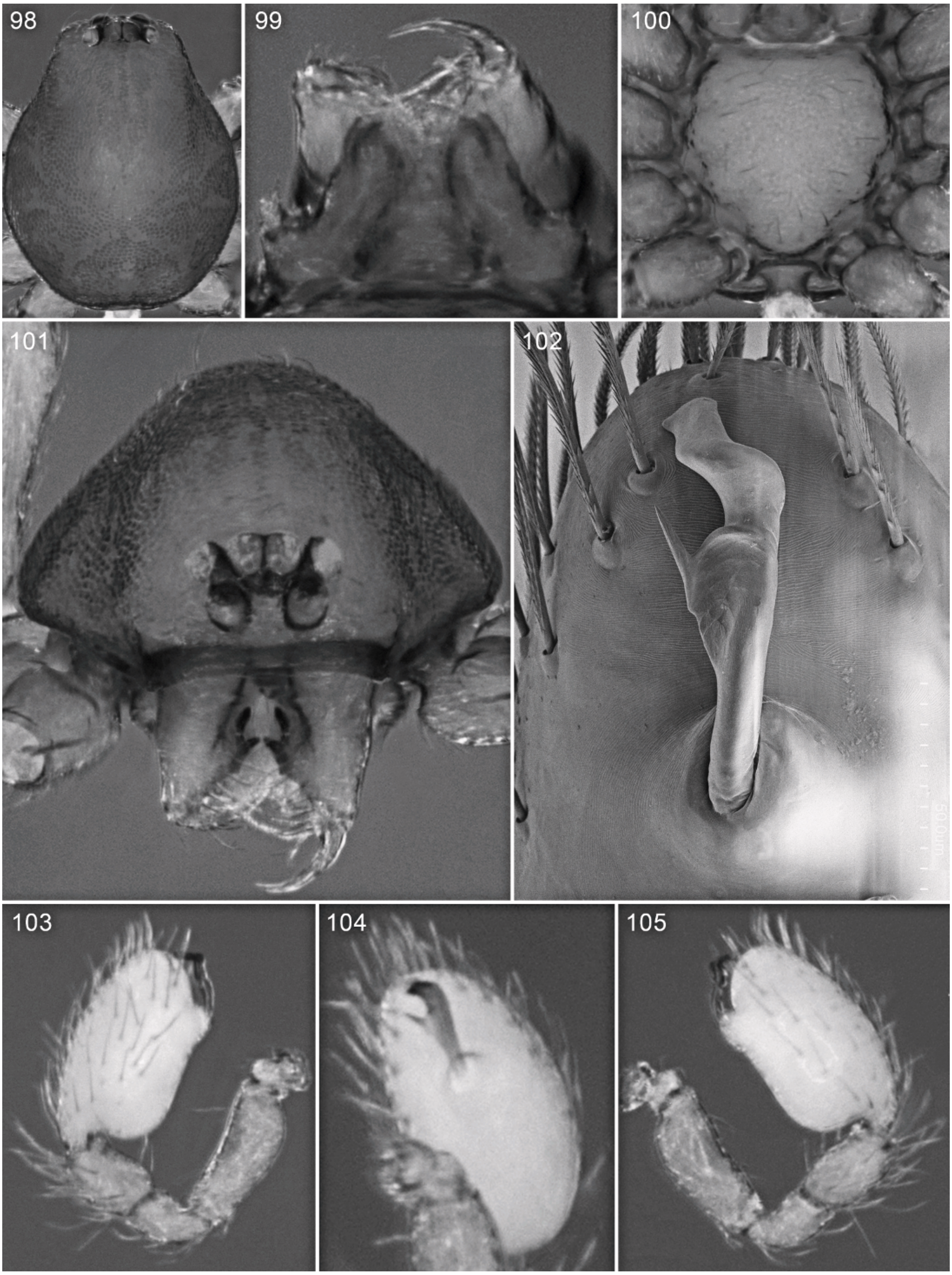
ETYMOLOGY: The specific name refers to the medially excavated chelicerae.

DIAGNOSIS: This species is sympatric with *P. consuelo,* but males can easily be distinguished by the excavated chelicerae (fig. 101) and the narrow, sharply pointed prolateral flange situated at about half of the embolar length (figs. 102, 104).

MALE (PBI_OON 40807, figs. 98–105): Total length 1.50. Elevated portion of pars cephalica granulate. Chilum large, triangular. Proximal half of paturon with deep median excavation, median edge with pair of dark projections. Endites anteriorly with two short, curved, clawlike processes, ventral process enlarged. Leg spination: femora I p0-0-2; tibiae: I v4-4-1p, II v4-3-0; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus small,



Figs. 85–97. *Paradysderina consuelo*, new species, male (85–91) and female (92–97). **85,** Carapace, dorsal view. **86, 92.** Same, anterior view. **87.** Sternum and mouthparts, ventral view. **88.** Left embolus, ventral view. **89.** Left palp, prolateral view. **90.** Same, ventral view. **91.** Same, retrolateral view. **93.** Abdomen, lateral view. **94.** Same, ventral view. **95, 96.** Epigastric region, ventral view. **97.** Same, dorsal view.



Figs. 98–105. *Paradysderina excavata*, new species, male. **98.** Carapace, dorsal view. **99.** Mouthparts, ventral view. **100.** Sternum, ventral view. **101.** Carapace, anterior view. **102.** Left embolus, ventral view. **103.** Left palp, prolateral view. **104.** Same, ventral view. **105.** Same, retrolateral view.

with spiniform, prolaterally directed flange at about half its length, tip hooked.

FEMALE: Unknown.

OTHER MATERIAL EXAMINED: **Peru:** *Cusco:* Consuelo, Manu Road, km 165, Oct. 4, 1982, rotten palm (L. Watrous, G. Mazurek, FMNH PBI_OON 10394), 1♂, same, leaf litter (L. Watrous, G. Mazurek, FMNH PBI_OON 10063), 2♂, Oct. 8, 1982, leaf litter (L. Watrous, G. Mazurek, FMNH PBI_OON 40922), 1♂, Oct. 10, 1982, leaf litter (L. Watrous, G. Mazurek, FMNH PBI_OON 40810), 1♂, Oct. 12, 1982, leaf litter (L. Watrous, G. Mazurek, FMNH PBI_OON 40921), 1♂, Oct. 13, 1982, leaf litter (L. Watrous, G. Mazurek, FMNH PBI_OON 40807), 6♂.

DISTRIBUTION: Peru (Cusco).

Paradysderina silvae, new species
Figures 106–118

TYPE: Male holotype taken from the canopy at an elevation of 2665 m at Paucartambo, Wayquecha, 13°11′25.41″S, 71°35′18.57″W, Cusco, Peru (Sept. 30, 2008; D. Silva), deposited in MUSM (501023, PBI_OON 544).

ETYMOLOGY: The specific name is a patronym in honor of the collector of the holotype, Diana Silva (MUSM).

DIAGNOSIS: The two sexes have not been collected together, and may be mismatched. Males can be recognized by the anterior prong on the chelicerae (figs. 107, 108) and the long, recurved ventral flange of the embolus (figs. 109–112), females by the T-shaped anterior portion of the anterior genitalic process (figs. 116–118).

MALE (PBI_OON 544, figs. 106–112): Total length 1.95. Elevated portion of pars cephalica appears reticulate. Chilum relatively wide, triangular. Paturon with sharp, anterior prong, directed medially. Endites anteriorly with two wide processes, ventral one with laterally directed projection, dorsal one with medially directed projection. Leg spination: femora: I p0-0-2, II p0-0-1; tibiae: I v4-4-2, II v3-3-1p; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus with ventral flange elongated, recurved, extending past tip of bulb, dorsal flange flattened.

FEMALE (PBI_OON 10879, figs. 113–118): Total length 2.31. Postepigastric scutum only around epigastric furrow, fused to epigastric scutum. Leg spination: femora: I p0-0-2, II p0-0-1; tibiae: I v4-4-2, II v4-4-1p; metatarsi: I v2-2-2, II v2-2-1p. Posterior margin of atrium rebordered except at midline; dark, wide, T-shaped sclerotization visible through cuticle in front of anterior atrial ridge; atrium with anterolaterally directed, internal protrusions.

OTHER MATERIAL EXAMINED: **Peru:** *Cusco:* Ccasapata, 0.6 mi NW Pacaypata, La Convención, 13°23.98′S, 73°9.87′W, May 8, 1998, Winkler, cloud forest leaf litter, elev. 7860 ft (P. Parillo, FMNH 61006, PBI_OON 10879), 1♀, May 8–14, 1998, baited pitfall, cloud forest, elev. 7860 ft (P. Parillo, FMNH 61005, PBI_OON 10878), 1♀; Pillahuata, Manu Road, km 128, Sept. 26, 1982, litter along stream (L. Watrous, G. Mazurek, FMNH PBI_OON 38398), 1♂, same, vine litter (L. Watrous, G. Mazurek, FMNH 33558, PBI_OON 10065), 1♂.

DISTRIBUTION: Peru (Cusco).

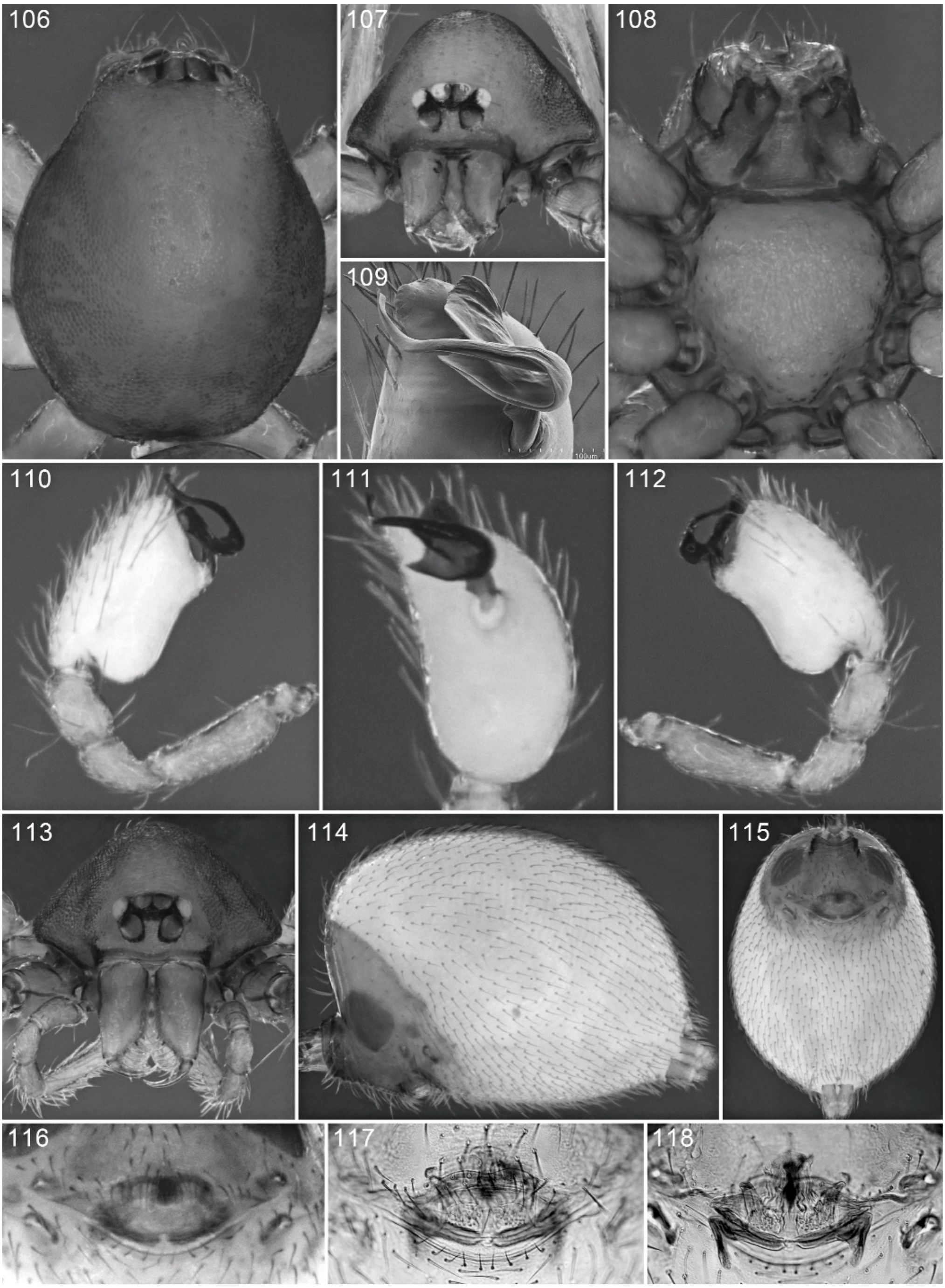
Paradysderina malkini, new species
Figures 119–131

TYPES: Male holotype and female allotype taken at an elevation of 2000 m at Torentoy Canyon, base of Machu Picchu, Cusco, Peru (June 16–17, 1964; B. Malkin), deposited in AMNH (PBI_OON 37876).

ETYMOLOGY: The specific name is a patronym in honor of the collector of the types, Borys Malkin.

DIAGNOSIS: Males can easily be recognized by the long, narrow, sharply recurved embolus (figs. 122–125), females by the rectangular base of the anterior genitalic process, which occupies most of the genital atrium (figs. 129–131).

MALE (PBI_OON 37876, figs. 119–125): Total length 1.89. Elevated portion of pars cephalica granulate. Chilum small, triangular, reflexed under clypeus. Paturon with sharp anterior prong directed dorsally and smaller, more basally situated, heavily sclerotized prong, also directed dorsally. Endite processes both short, wide, with tips directed medially. Leg spination: femora I p0-0-2; tibiae: I v4-4-2, II v4-4-1p; metatarsi: I v2-2-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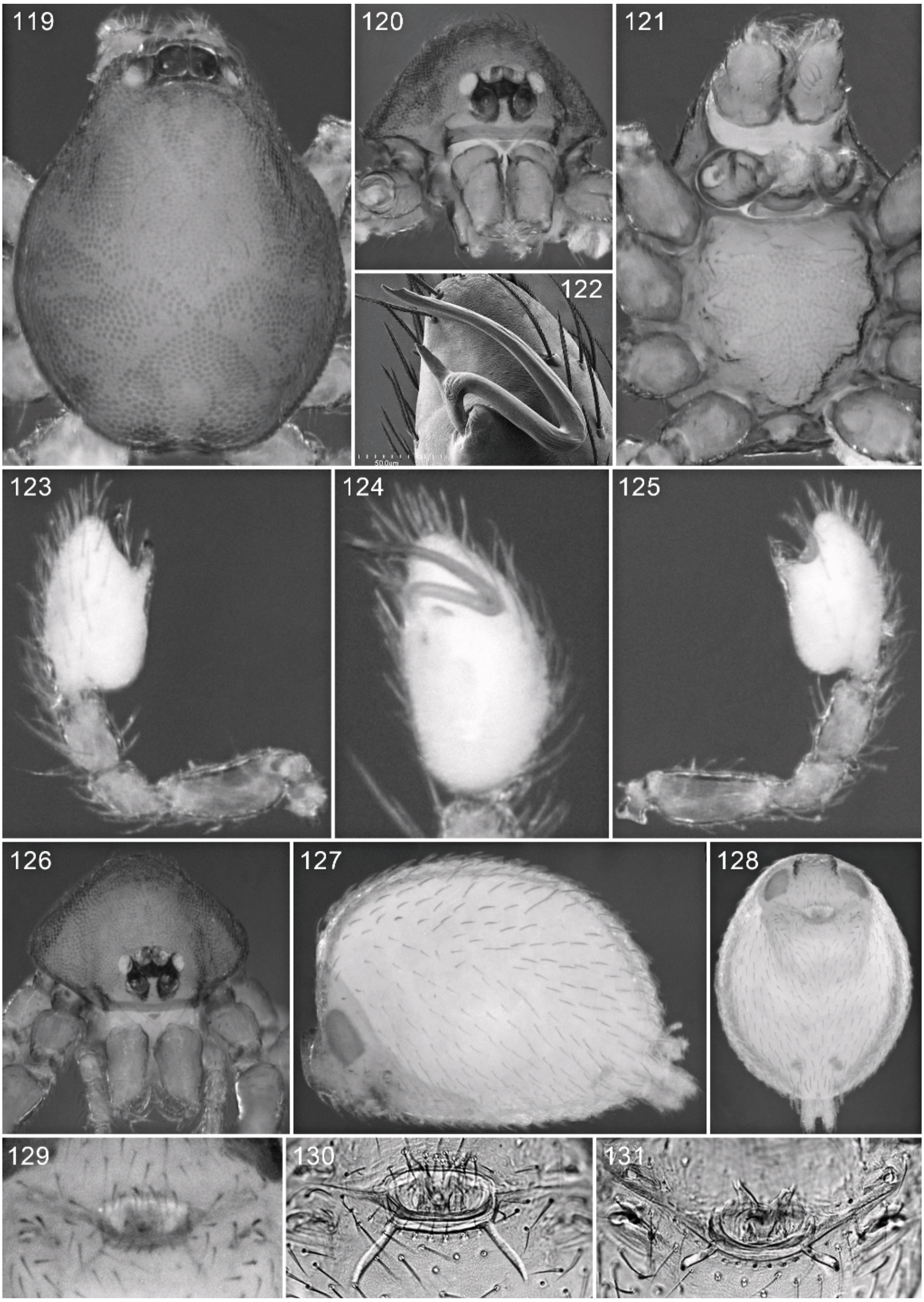
Figs. 106–118. *Paradysderina silvae*, new species, male (106–112) and female (113–118). **106,** Carapace, dorsal view. **107, 113.** Same, anterior view. **108.** Sternum and mouthparts, ventral view. **109.** Left embolus, ventral view. **110.** Left palp, prolateral view. **111.** Same, ventral view. **112.** Same, retrolateral view. **114.** Abdomen, lateral view. **115.** Same, ventral view. **116, 117.** Epigastric region, ventral view. **118.** Same, dorsal view.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Figs. 119–131. *Paradysderina malkini*, new species, male (119–125) and female (126–131). **119.** Carapace, dorsal view. **120, 126.** Same, anterior view. **121.** Sternum and mouthparts, ventral view. **122.** Left embolus, ventral view. **123.** Left palp, prolateral view. **124.** Same, ventral view. **125.** Same, retrolateral view. **127.** Abdomen, lateral view. **128.** Same, ventral view. **129, 130.** Epigastric region, ventral view. **131.** Same, dorsal view.

1p, II v2-2-0. Palps symmetrical; embolus ventral flange short, sharply pointed, dorsal flange much longer, recurved, forming backward C-shaped structure.

FEMALE (PBI_OON 37876, figs. 126–131): Total length 2.17. Chilum almost rectangular. Postepigastric scutum extending about one-third of abdominal length, fused to epigastric scutum. Leg spination: femora: I p0-0-2, II p0-0-1; tibiae: I v4-4-2, II v4-4-1p; metatarsi: I v2-2-1p, II v2-2-0. Genitalic atrium ovoid; anterior genitalic process with rectangular base, extending to anterior atrial margin.

OTHER MATERIAL EXAMINED: **Peru:** *Cusco:* Río Camisea, Armihuari, 11°51′S, 72°46′W, Oct. 12, 1997, pitfall, elev. 560 m (S. Córdova, MUSM 501452, PBI_OON 530), 2♂; Río Camisea, Cashiari 3, 11°52′57″S, 72°39′02″W, Nov.–Dec. 1997, elev. 690 m (J. Duárez, S. Córdova, MUSM 50148, PBI_OON 531, 532), 1♂, 1♀; Río Camisea, Pagoreni, 11°42′22.5″S, 72°54′10.7″W, May 7–28, 1998, elev. 465 m (S. Córdova, MUSM 501422, 501432, PBI_OON 528, 529), 3♂, same, pitfall with bait (S. Córdova, MUSM 501420, PBI_OON 533), 1♀; Torentoy Canyon, base of Machu Picchu, June 16–17, 1964, elev. 2000 m (B. Malkin, AMNH PBI_OON 37876), 1♂, 1♀, June 19–23, 1964, elev. 2000–2200 m (B. Malkin, AMNH PBI_OON 103), 1♂.

DISTRIBUTION: Peru (Cusco).

Paradysderina maldonado, new species
Figures 132–139

TYPE: Male holotype taken from leaf litter at Marcapata, Puerto Maldonado Road, km 175, Cusco, Peru (Oct. 21, 1981; L. Watrous, G. Mazurek), deposited in FMNH (33570, PBI_OON 10077).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males can be recognized by the relatively small embolus that is T-shaped in prolateral view and only distally divided into dorsal and ventral flanges (figs. 136–139).

MALE (PBI_OON 10077, figs. 132–139): Total length 2.05. Elevated portion of pars cephalica appears reticulate. Chilum tiny, triangular, reflexed under clypeus. Paturon medially excavated, with rectangular median projection bearing dorsally directed, long, thin, heavily sclerotized spine. Endite processes short, tip of ventral process directed distally, tip of dorsal process directed medially. Leg spination: femora: I p0-0-2, II p0-0-1; tibiae: I v4-4-2, II v4-4-1p; metatarsi: I v2-2-2, II v2-2-1p. Palps symmetrical; embolus relatively small, rectangular, ventral and dorsal flanges parallel, directed apically, with large (ejaculatory?) opening.

FEMALE: Unknown.

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Peru (Cusco).

Paradysderina asymmetrica, new species
Figures 140–157

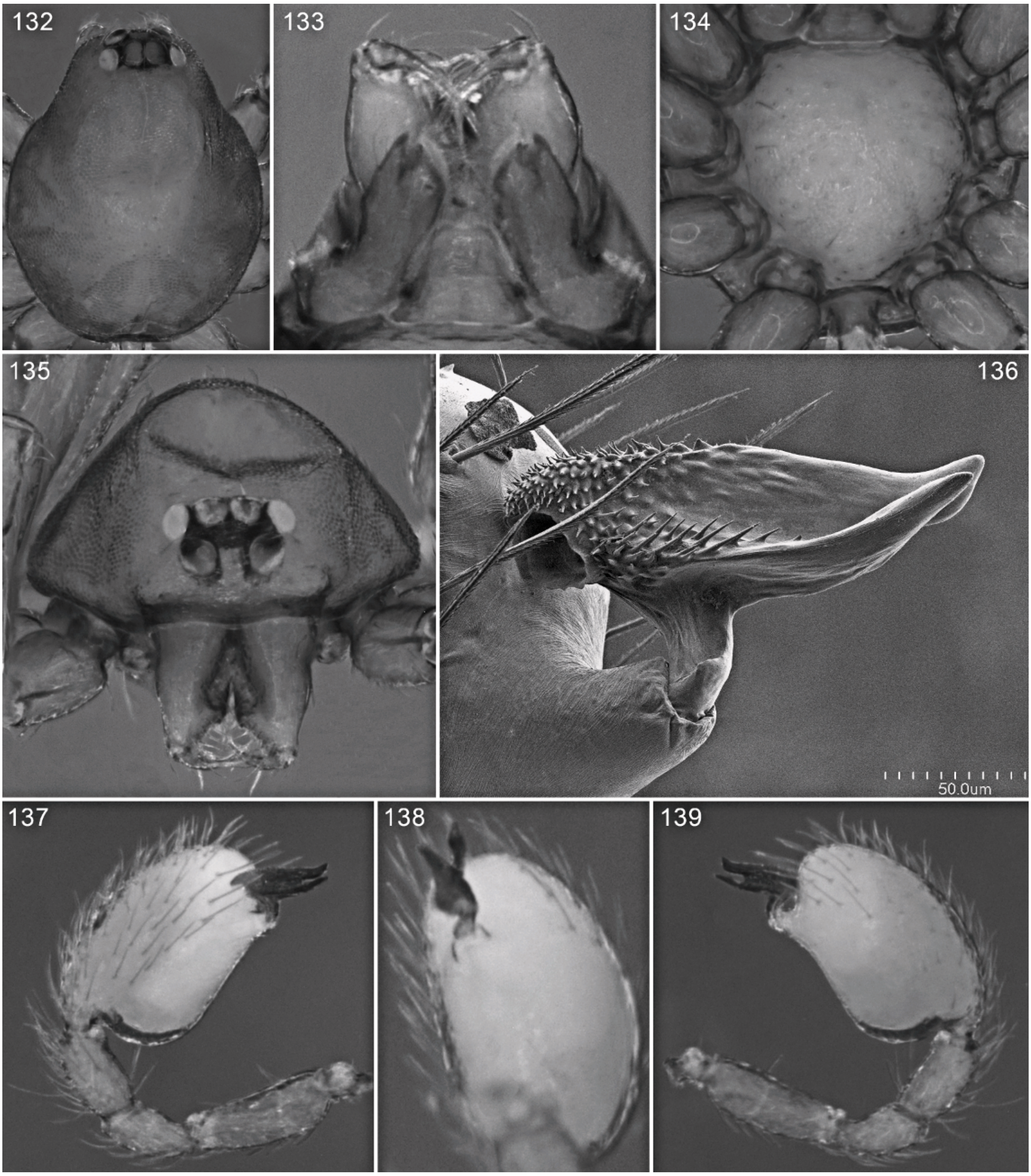
TYPE: Male holotype taken in pitfall trap at an elevation of 465 m at Río Camisea, Pagoreni, 11°42′22.5″S, 72°54′10.7″W, Cusco, Peru (May 7–28, 1998; S. Córdova), deposited in MUSM (501435, PBI_OON 534).

ETYMOLOGY: The specific name refers to the differences between the right and left palps.

DIAGNOSIS: Males can easily be distinguished by uninflated right palp (figs. 149–151) and the cross-shaped embolus (figs. 144, 145), females by the complex, wide anterior genitalic process (figs. 155–157).

MALE (PBI_OON 534, figs. 140–151): Total length 1.45. Elevated portion of pars cephalica appears reticulate. Chilum short, relatively wide. Paturon with strongly produced anterior ledge bearing small, sharp, ventrally directed process, inner margin with strong, heavily sclerotized spine. Endites anteriorly with two strong, curved, clawlike processes. Leg spination: femur I p0-0-1; tibiae: I v4-4-0, II v4-3-0; metatarsi: I v2-2-1p, II v2-1p-0. Right palp much less inflated than left palp, widened distally; right embolus with distal half much longer, directed more medially than left embolus.

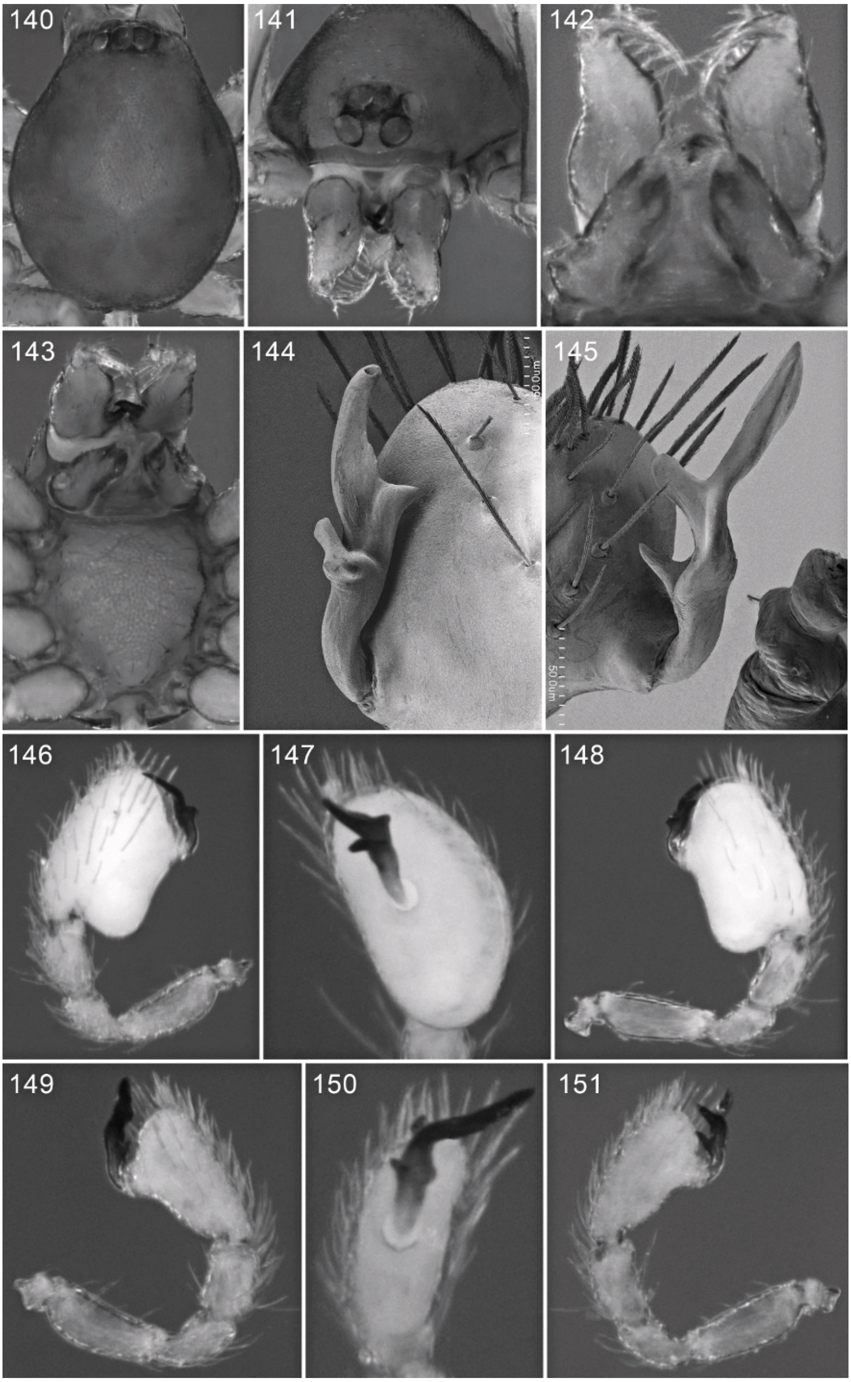
FEMALE (PBI_OON 537, figs. 152–157): Total length 1.62. Chilum small, triangular. Postepigastric scutum covering about one-third of abdomen length, fused to epigastric scutum. Leg spination: femora: I p0-0-2, II p0-0-1; tibiae I, II v4-4-1p; metatarsi I, II v2-



Figs. 132–139. *Paradysderina maldonado*, new species, male. **132.** Carapace, dorsal view. **133.** Mouthparts, ventral view. **134.** Sternum, ventral view. **135.** Carapace, anterior view. **136.** Left embolus, ventral view. **137.** Left palp, prolateral view. **138.** Same, ventral view. **139.** Same, retrolateral view.

2-1p. Anterior genitalic process heavily sclerotized, wide, darkest along midline.

Other Material Examined: **Peru:** *Cusco:* Río Camisea, Pagoreni, 11°42′22.5″S, 72°54′10.7″W, May 7–28, 1998, pitfalls, elev. 465 m (S. Córdova, MUSM 501421, 501423, 501435, PBI_OON 534, 535), 5♂, same (S. Córdova, MUSM 501428, 501447, 501468, PBI_OON 537–539), 3♀. *Madre de Dios:* Quebrada Las Piedras, UTM E:245504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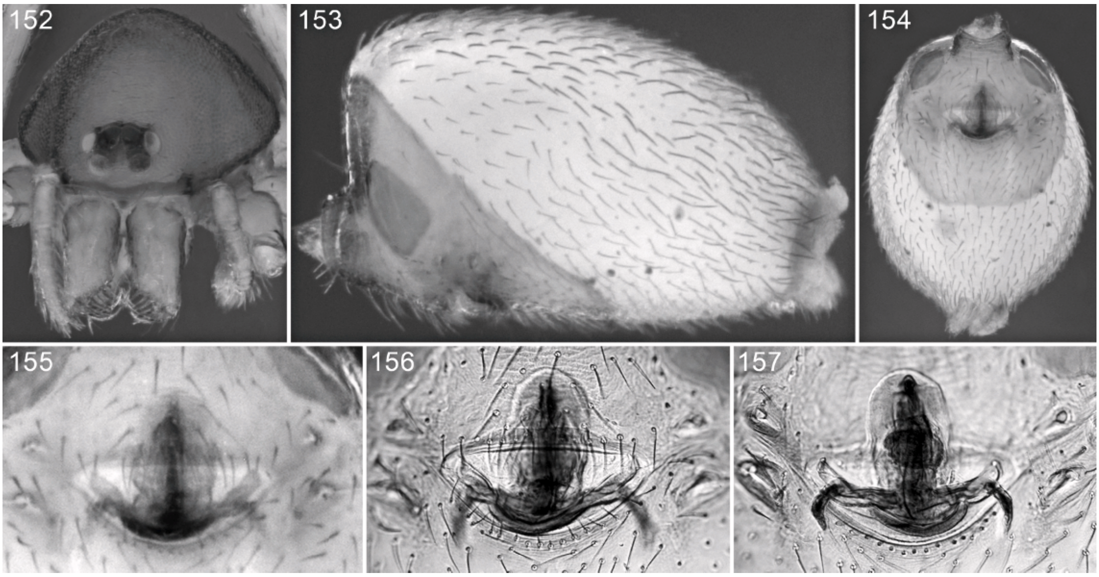
Figs. 140–151. *Paradysderina asymmetrica*, new species, male. **140.** Carapace, dorsal view. **141.** Same, anterior view. **142.** Mouthparts, ventral view. **143.** Sternum and deflected chelicerae, ventral view. **144.** Left embolus, retrolateral view. **145.** Right embolus, retrolateral view. **146.** Left palp, prolateral view. **147.** Same, ventral view. **148.** Same, retrolateral view. **149.** Right palp, prolateral view. **150.** Same, ventral view. **151.** Same, retrolateral view.



Figs. 152–157. *Paradysderina asymmetrica*, new species, female. **152.** Carapace, dorsal view. **153.** Abdomen, lateral view. **154.** Same, ventral view. **155, 156.** Epigastric region, ventral view. **157.** Same, dorsal view.

N:8578114, May 2008, montane bamboo forest (M. Vasquez, MELM PBI_OON 15056), 1♂.

DISTRIBUTION: Peru (Cusco, Madre de Dios).

Paradysderina apurimac, new species
Figures 158–173

TYPE: Male holotype from Río Apurimac, Llactohuaman, 12°51′S, 73°30′W, Cusco, Peru (July 11–29, 1998; J. Duárez, S. Córdova), deposited in MUSM (501448, PBI_OON 540).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

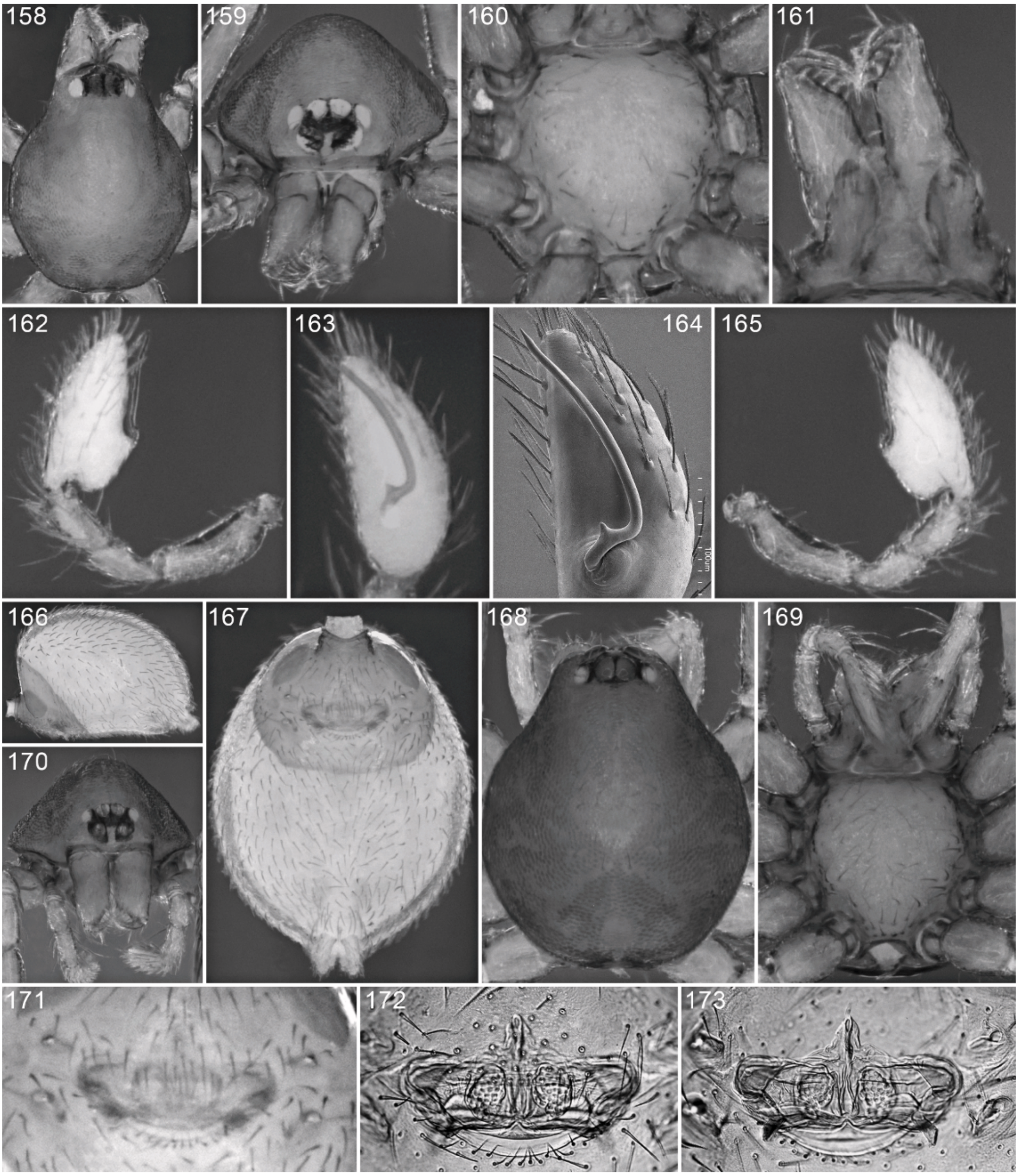
DIAGNOSIS: Males and females have not been taken together, and may be mismatched. Males can be recognized by the long, narrow embolus, which resembles those of *Scaphiella* species and has the ventral prong reduced to a small tubercle (figs. 163, 164), females by the sclerotized lateral margins of the genitalic atrium (figs. 171–173), which is greatly widened and occupies most of the space between the anterior spiracles.

MALE (PBI_OON 540, figs. 158–165): Total length 1.47. Elevated portion of pars cephalica appears reticulate. Chilum triangular. Paturon with anterior ledge bearing dorsally directed process at its dorsomedian edge, plus long, thin, heavily sclerotized spine directed toward chilum. Endites anteriorly with two short, curved, clawlike processes. Leg spination: femur I p0-0-2; tibiae: I v4-4-1p, II v4-4-0; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus with ventral flange reduced to small tubercle, dorsal flange narrow, elongate.

FEMALE (PBI_OON 113, figs. 166–173): Total length 1.69. Postepigastric scutum covering about one-third of abdomen length, fused to epigastric scutum. Leg spination: femur I p0-0-2; tibiae: I v4-4-2, II v4-4-1p; metatarsi I, II v2-2-1p. Genitalic atrium very wide, laterally sclerotized, median one-third occupied by rectangular anterior genitalic elements.

OTHER MATERIAL EXAMINED: **Peru:** *Junín:* Estancia Naranjal, San Ramón, July 20–27, 1965, elev. 1000 m (P., B. Wygodzinsky, AMNH PBI_OON 102), 1♀; Pichita Caluga, Estancia Naranjal, San Ramón, July 21, 1965, elev. 2000 m (P., B. Wygodzinsky, AMNH PBI_OON 113), 2♀.

DISTRIBUTION: Peru (Cusco, Junín).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Figs. 158–173. *Paradysderina apurimac*, new species, male (158–165) and female (166–173). **158, 168.** Carapace, dorsal view. **159, 170.** Same, anterior view. **160.** Sternum, ventral view. **161.** Mouthparts, ventral view. **162.** Left palp, prolateral view. **163, 164.** Same, ventral view. **165.** Same, retrolateral view. **166.** Abdomen, lateral view. **167.** Same, ventral view. **169.** Sternum and mouthparts, ventral view. **171, 172.** Epigastric region, ventral view. **173.** Same, dorsal view.

Paradysderina convencion, new species
Figures 174–186

TYPE: Male holotype taken in a Winkler trap at an elevation of 581 m at Reserva Comunal Matsigenga, La Convención, 12°10′20.98″S, 73°02′32.48″W, Cusco, Peru (Aug. 16, 2007; A. Asenjo), deposited in MUSM (501483, PBI_OON 541).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: The two sexes have not been not collected together, and may be mismatched. Males can be recognized by the gradually increasing width of the embolus (figs. 177–180), females by the basally widened anterior genitalic process (figs. 184–186).

MALE (PBI_OON 541, figs. 174–181): Total length 1.62. Elevated portion of pars cephalica granulate. Chilum wide, triangular. Paturon with ventrally directed, median prong situated on ventral edge of anterior swelling. Endites anteriorly with two long, narrow, clawlike processes. Leg spination: femur I p0-0-2; tibiae: I v4-4-1p, II v4-4-0; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus sinuous, ventral flange depressed, dorsal flange with dorsal tubercle.

FEMALE (PBI_OON 542, figs. 182–186): Total length 2.27. Postepigastric scutum covering about one-third of abdomen length, not fused to epigastric scutum. Leg spination: legs I, II missing. Most of atrial width occupied by wide anterior genitalic process, that process with transverse sclerotization at about level of anterior atrial margin.

OTHER MATERIAL EXAMINED: **Peru:** *Cusco:* La Convención, 12°24′57.54″S, 73°08′30.84″W, Apr. 16, 2007, elev. 2112 m (W. Paredes, MUSM 501284, PBI_OON 542), 1♀.

DISTRIBUTION: Peru (Cusco).

Paradysderina macho, new species
Figures 187–195

TYPE: Male holotype taken at an elevation of 1720 m at Quellouno, Alto Lorohuacana, Calca, 12°35′11.05″S, 72°31′07.19″W, Cusco, Peru (Dec. 14, 2009; W. Paredes), deposited in MUSM (501269, PBI_OON 543).

ETYMOLOGY: The specific name, meaning male in Spanish, refers to the exaggerated, darkened appearance of the male, with enlarged swellings that almost double the thickness of the chelicerae.

DIAGNOSIS: Males can easily be recognized by their darkened coloration (the carapace and abdominal scuta are dark reddish brown, the dorsal scutum has a submarginal, U-shaped row of lighter spots (fig. 189), the postepigastric scutum has a W-shaped row of submarginal, lighter spots, and the leg coxae and femora are darkened) and by the highly modified chelicerae (fig. 188); the embolus is short and wide (figs. 192–195).

MALE (PBI_OON 543, figs. 187–195): Total length 1.92. Elevated portion of pars cephalica granulate. Chilum large, long, triangular. Paturon with anterior swelling greatly produced, almost doubling thickness of chelicerae, bearing long, sharply pointed, ventrally directed, median prong at ventral edge of swelling; inner margin with heavily sclerotized, dorsally directed spine at base. Endites anteriorly with two long, narrow, clawlike processes. Leg spination: femur I p0-0-2; tibiae: I v4-4-2, II v4-4-1p; metatarsi: I v2-2-2, II v2-2-1p. Palps symmetrical; embolus short, wide, extending across distal tip of palpal bulb.

FEMALE: Unknown.

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Peru (Cusco).

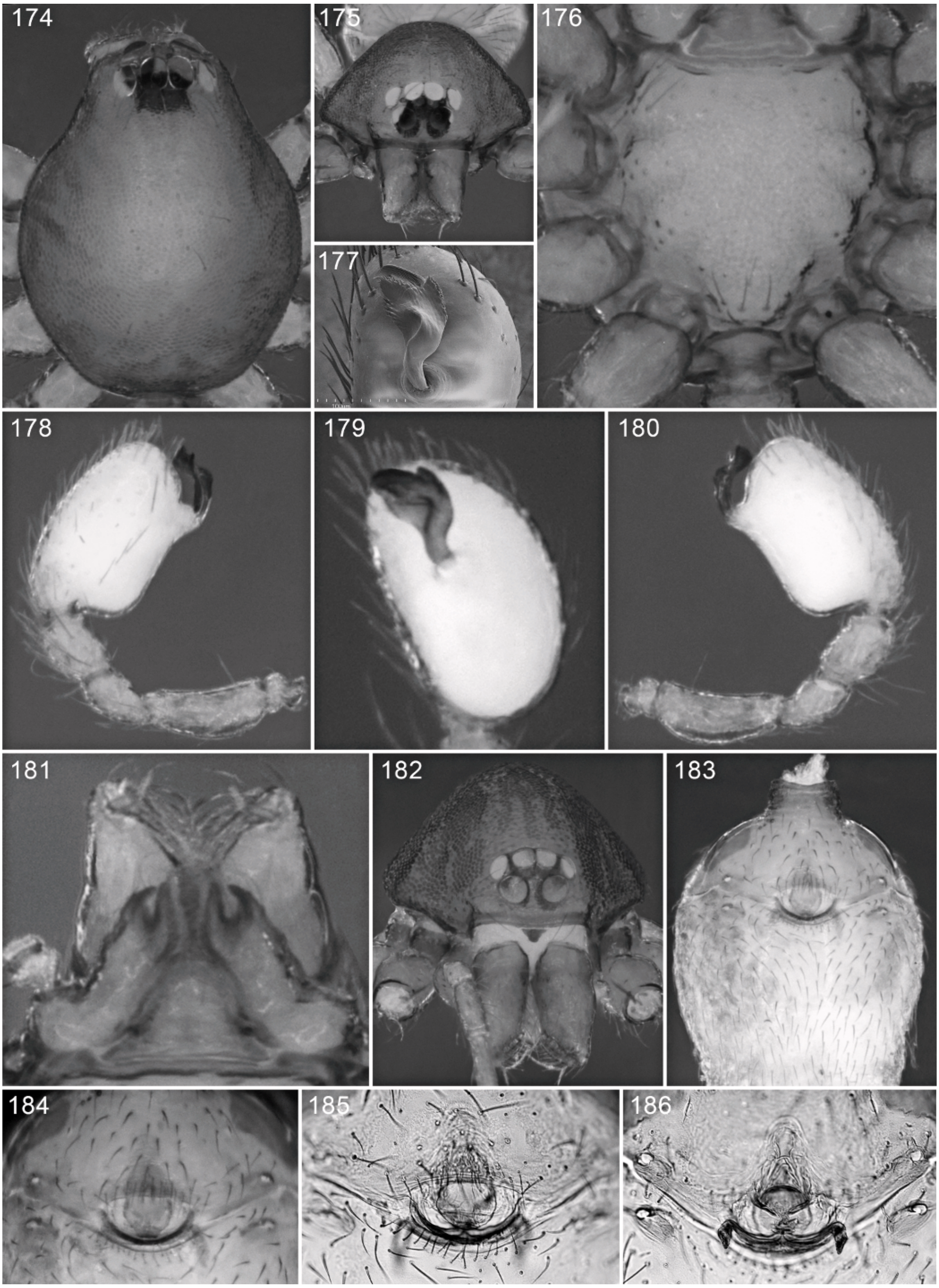
Paradysderina tambopata, new species
Figures 196–213

TYPES: Male holotype, female allotype, and female paratype taken from bamboo litter at Tambopata, Madre de Dios, Peru (Oct. 28, 1982; L. Watrous, G. Mazurek), deposited in FMNH (PBI_OON 10584).

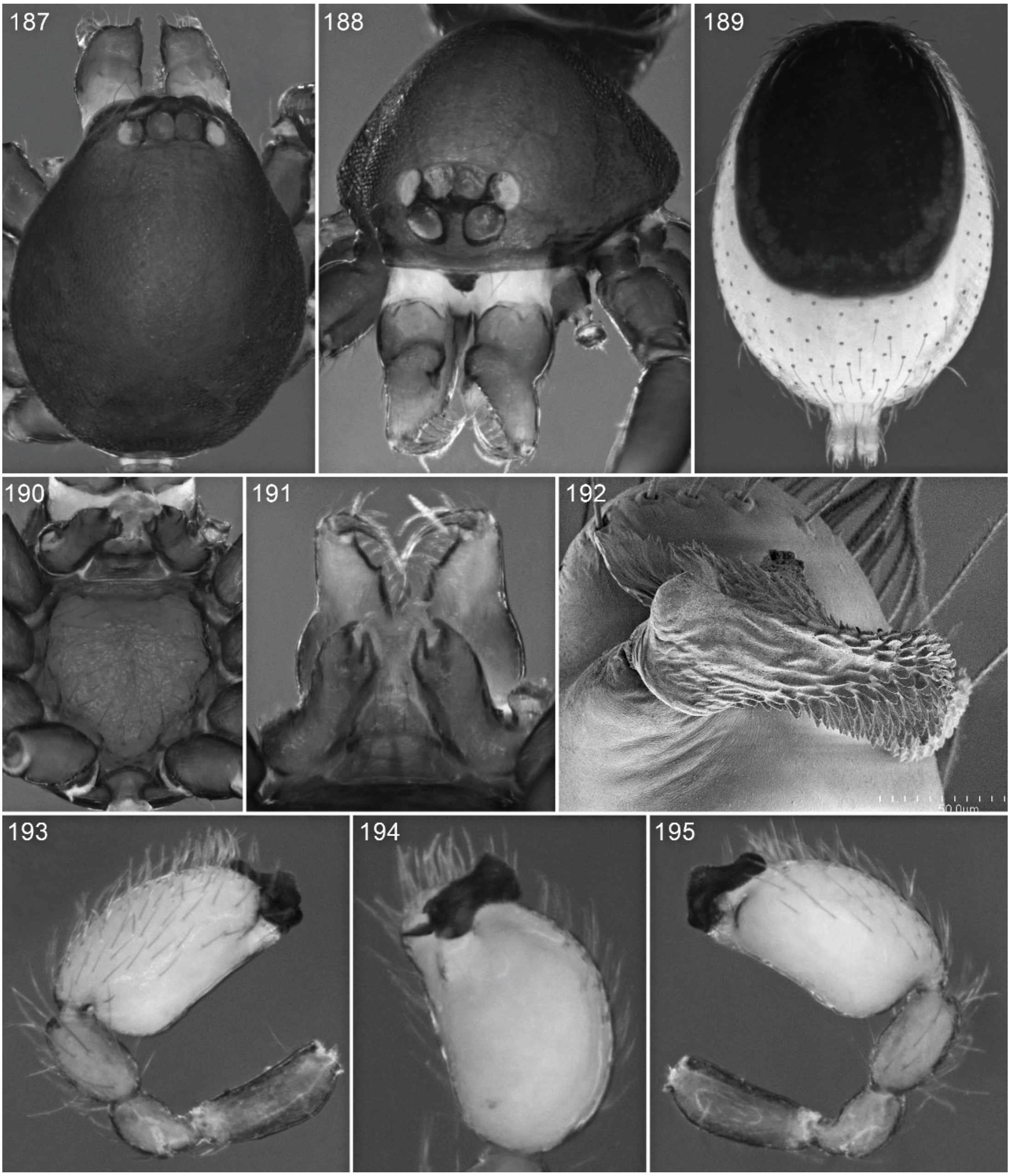
ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males resemble those of *P. asymmetrica* in having the right palp greatly reduced (figs. 202–207); the right embolus is much wider than the left (figs. 200, 201). Females have the almost circular anterior genitalic elements filling much of the genitalic atrium in ventral view (figs. 211–213).

MALE (PBI_OON 10584, figs. 196–207): Total length 1.33. Elevated portion of pars cephalica granulate. Chilum short, wide, triangular. Paturon with medially directed

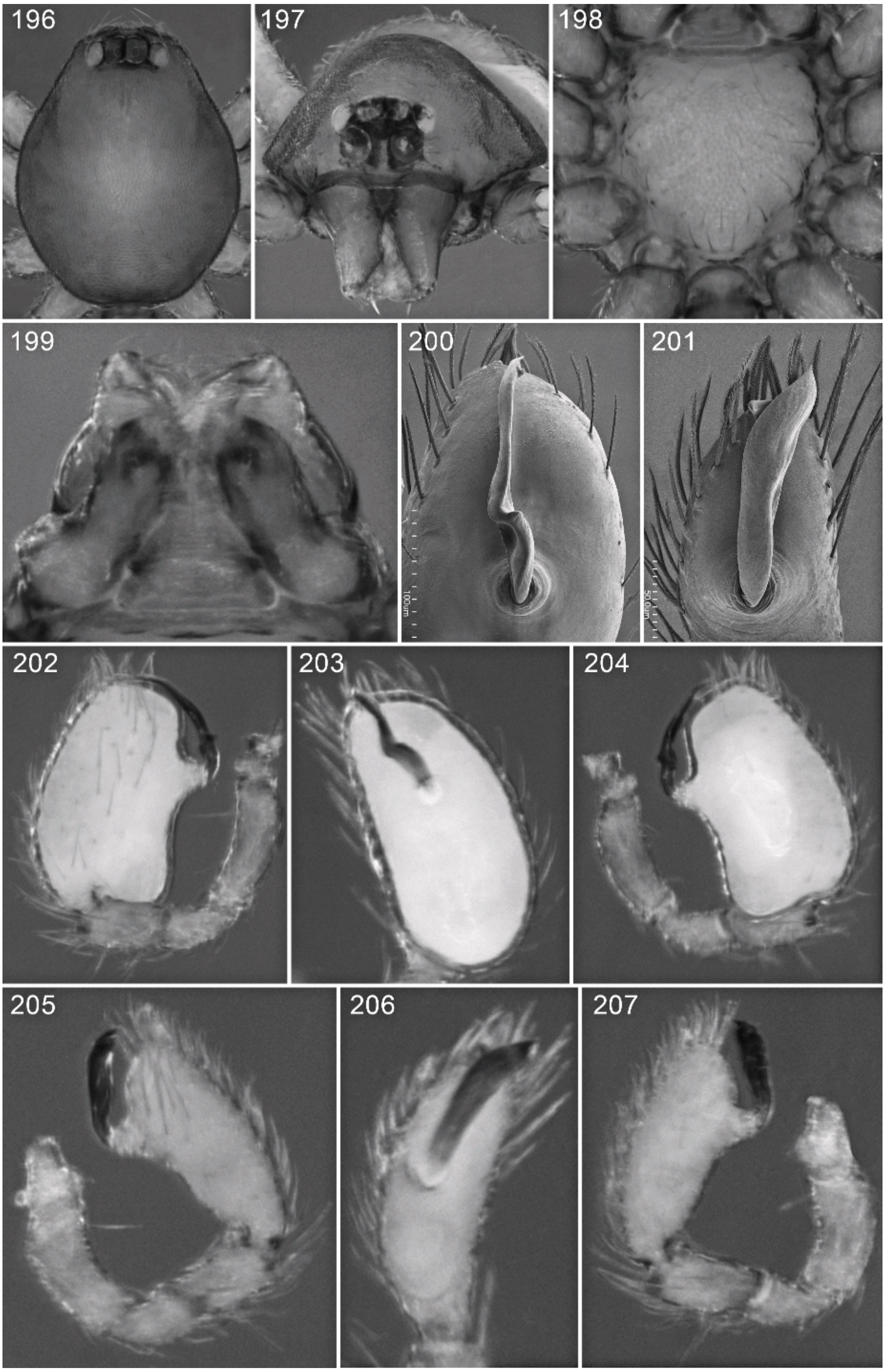


Figs. 174–186. *Paradysderina convencion*, new species, male (174–181) and female (182–186). **174.** Carapace, dorsal view. **175, 182.** Same, anterior view. **176.** Sternum, ventral view. **177.** Left embolus, ventral view. **178.** Left palp, prolateral view. **179.** Same, ventral view. **180.** Same, retrolateral view. **181.** Mouthparts, ventral view. **183.** Abdomen, ventral view. **184, 185.** Epigastric region, ventral view. **186.** Same, dorsal view.



Figs. 187–195. *Paradysderina macho*, new species, male. **187.** Carapace, dorsal view. **188.** Same, anterior view. **189.** Abdomen, dorsal view. **190.** Sternum, ventral view. **191.** Mouthparts, ventral view. **192.** Left embolus, ventral view. **193.** Left palp, prolateral view. **194.** Same, ventral view. **195.** Same, retrolateral view.

prong on inner surface of anterior swelling; inner margin with obliquely ventrally directed, heavily sclerotized spine. Endites anteriorly with two wide, distally curved, clawlike processes, ventral process widened. Leg spination: femur I p0-0-1; tibiae: I v4-4-0, II v4-2-0; metatarsi: I v2-2-1p, II v2-2-0. Right palp much less inflated than left palp; left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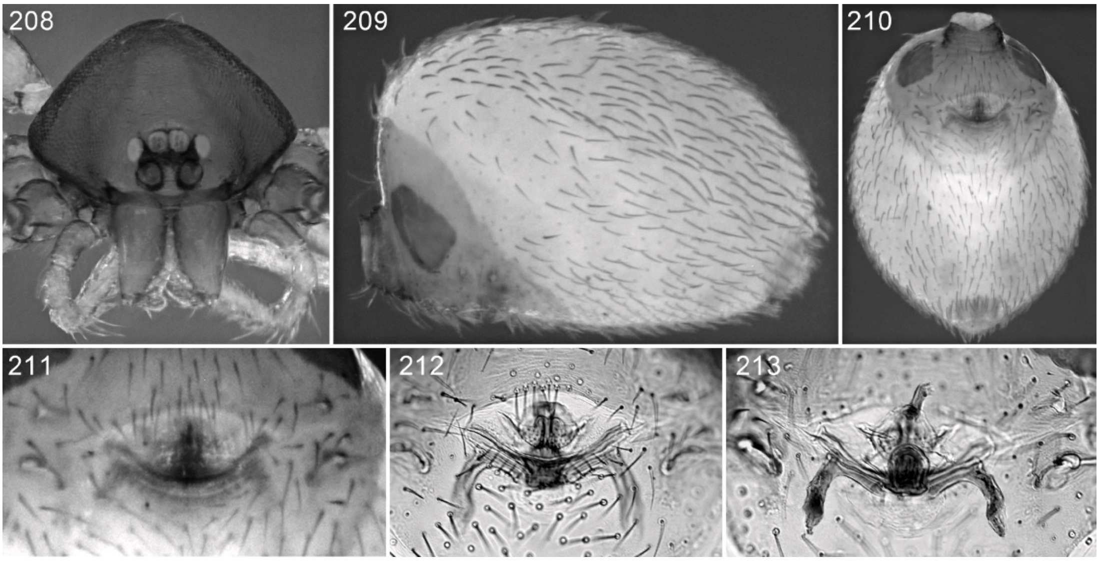
Figs. 196–207. *Paradysderina tambopata*, new species, male. **196.** Carapace, dorsal view. **197.** Same, anterior view. **198.** Sternum, ventral view. **199.** Mouthparts, ventral view. **200.** Left embolus, ventral view. **201.** Right embolus, ventral view. **202.** Left palp, prolateral view. **203.** Same, ventral view. **204.** Same, retrolateral view. **205.** Right palp, prolateral view. **206.** Same, ventral view. **207.** Same, retrolateral view.



Figs. 208–213. *Paradysderina tambopata*, **208.** Carapace, anterior view. **209.** Abdomen, lateral view. **210.** Same, ventral view. **211, 212.** Epigastric region, ventral view. **213.** Same, dorsal view.

embolus *Scaphiella*-like, twisted near base, right embolus much thicker, shorter.

FEMALE (PBI_OON 10584, figs. 208–213): Total length 1.62. Postepigastric scutum covering about one-third of abdomen length, fused to epigastric scutum. Leg spination: femur I p0-0-2; tibiae: I v4-4-2, II v4-3-1p; metatarsi I, II v2-2-1p. Anterior genitalic process heavily sclerotized, occupying about one-third of atrial width, with thumblike posterior sclerotization.

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Peru (Madre de Dios).

Paradysderina schizo, new species
Figures 214–223

TYPE: Male holotype taken in secondary rainforest at an elevation of 300 m at Cuzco Amazonica, 12°33′34″S, 69°03′44″W, Madre de Dios, Peru (May 17, 1995; D. Agosti), deposited in AMNH (PBI_OON 107).

ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: Males resemble those of *P. asymmetrica* and *P. tambopata* in having the right palp reduced in size (figs. 218–223); the left embolus is straighter than in those species, and distally arrow shaped (fig. 219).

MALE (PBI_OON 107, figs. 214–223): Total length 1.41. Elevated portion of pars cephalica granulate. Chilum distally narrowed, triangular. Paturon with small, triangular, anteriorly directed, median projection on dorsal edge of swelling, inner margin with heavily sclerotized, dorsally directed spine. Endites anteriorly with two short, curved processes, ventral process much wider than dorsal one. Leg spination: femur I p0-0-1; tibiae: I v4-4-0, II v4-3-0; metatarsi: I v2-2-1p, II v2-2-0. Right palp much smaller than left palp; left embolus twisted at midlength, distally arrow shaped, right embolus shorter, distally bifid.

FEMALE: Unknown.

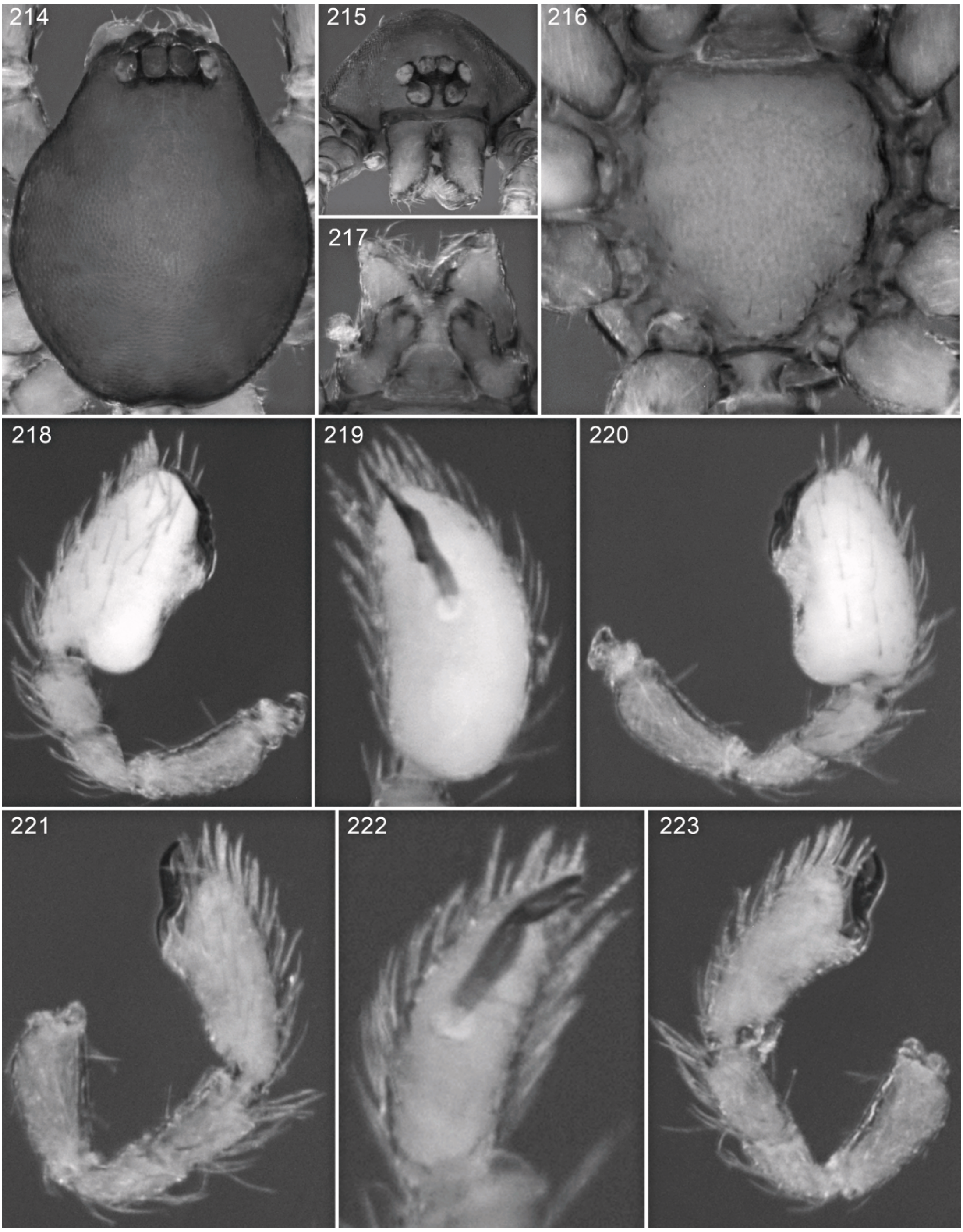
OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Peru (Madre de Dios).

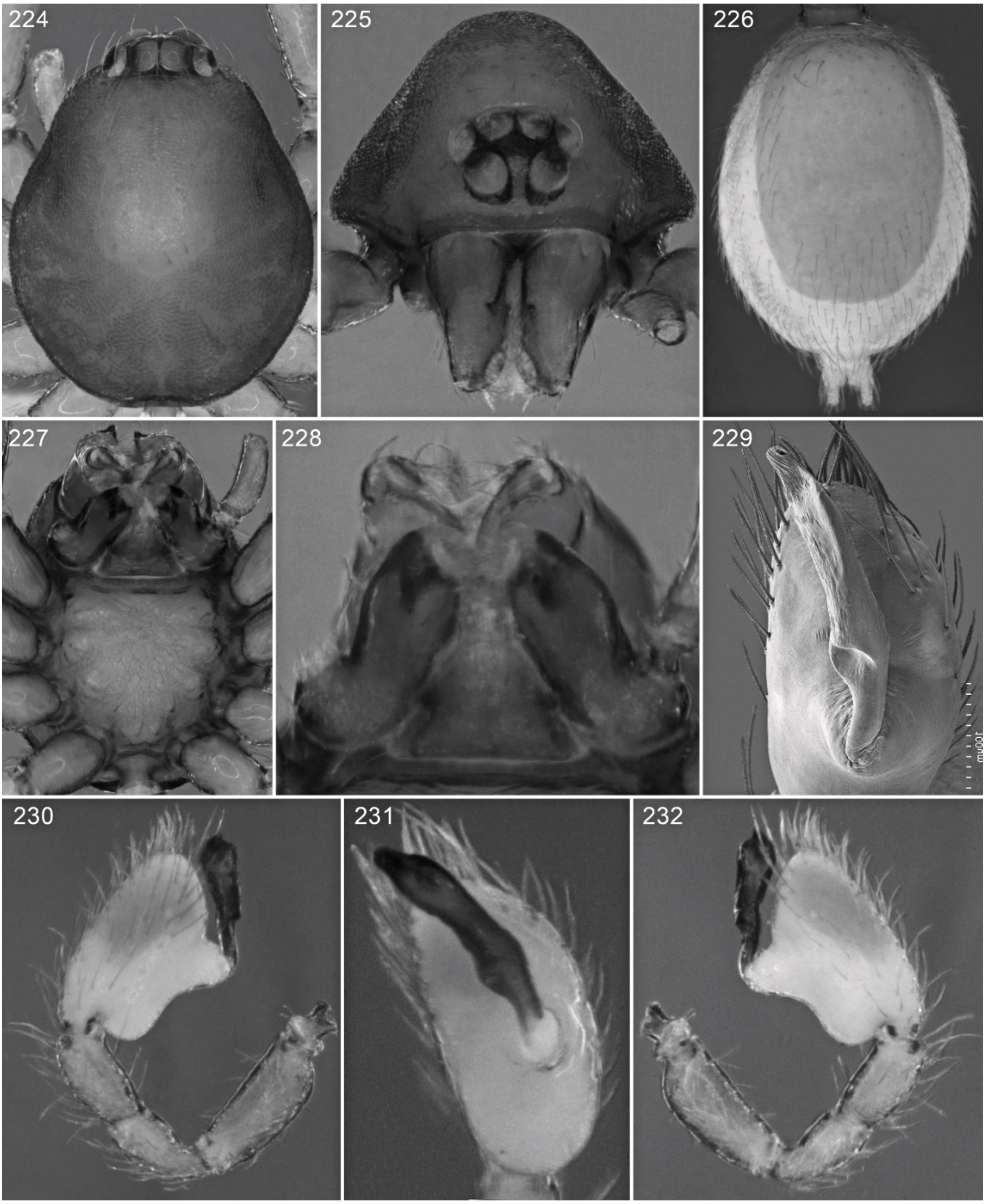
Paradysderina wygodzinskyi, new species
Figures 224–238

TYPES: Male holotype, female allotype, and male paratype taken at an elevation of 1800 m at Huacapistana, Junín, Peru (July 27–30, 1965; P., B. Wygodzinsky), deposited in AMNH (PBI_OON 104).

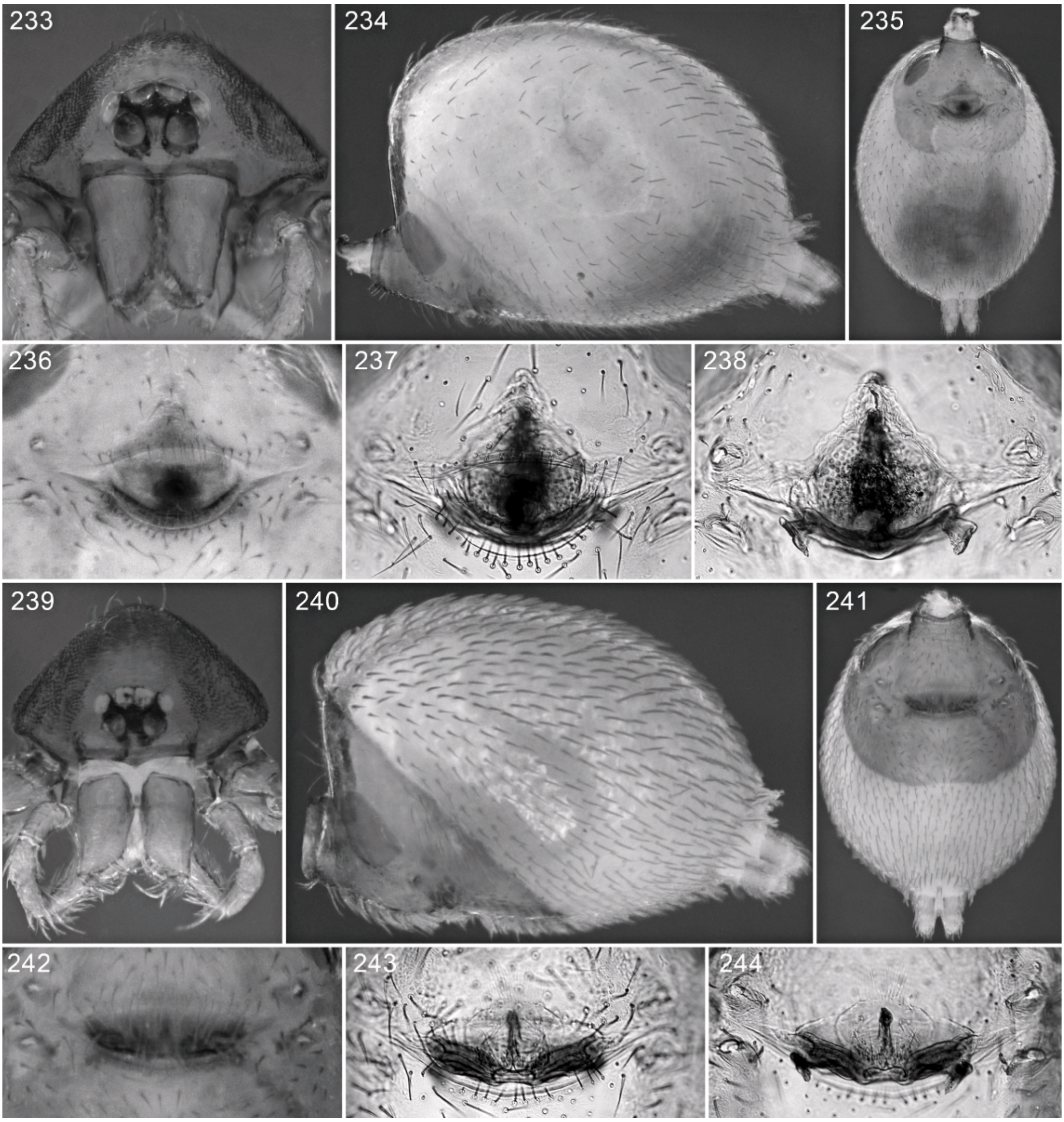
ETYMOLOGY: The specific name is a patronym in honor of Pedro Wygodzinsky, one of the collectors of the type series.



Figs. 214–223. *Paradysderina schizo*, new species, male. **214.** Carapace, dorsal view. **215.** Same, anterior view. **216.** Sternum, ventral view. **217.** Mouthparts, ventral view. **218.** Left palp, prolateral view. **219.** Same, ventral view. **220.** Same, retrolateral view. **221.** Right palp, prolateral view. **222.** Same, ventral view. **223.** Same, retrolateral view.



Figs. 224–232. *Paradysderina wygodzinskyi*, new species, male. **224.** Carapace, dorsal view. **225.** Same, anterior view. **226.** Abdomen, dorsal view. **227.** Sternum, ventral view. **228.** Mouthparts, ventral view. **229.** Left embolus, ventral view. **230.** Left palp, prolateral view. **231.** Same, ventral view. **232.** Same, retrolateral view.



Figs. 233–244. 233–238. *Paradysderina wygodzinskyi*, new species, female. 239–244. *P. newtoni*, new species, female. **233, 239.** Carapace, anterior view. **234, 240.** Abdomen, lateral view. **235, 241.** Same, ventral view. **236, 237, 242, 243.** Epigastric region, ventral view. **238, 244.** Same, dorsal view.

DIAGNOSIS: Males can be recognized by the long embolus, which is expanded at about one-fourth its length and has a rounded tip (figs. 229, 231), females by the very heavily sclerotized anterior genitalic elements (figs. 236–238).

MALE (PBI_OON 104, figs. 224–232): Total length 2.29. Elevated portion of pars cephalica granulate. Chilum large, triangular. Paturon with sharply pointed, ventrally directed projection on ventral edge of anterior ledge, inner margin with heavily sclerotized, dorsally directed spine reaching to tip of chilum. Endites anteriorly with two wide, clawlike processes. Leg spination: femur I p0-0-2; tibiae I, II v4-4-2; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus sword shaped, laterally expanded at about one-fourth its length.

FEMALE (PBI_OON 104, figs. 233–238): Total length 2.65. Postepigastric scutum covering about one-third of abdomen length, fused to epigastric scutum. Leg spination: femora I, II p0-0-2; tibiae I, II v4-4-2; metatarsi: I v2-2-2, II v2-2-1p. Anterior genitalic process heavily sclerotized, mushroom shaped, sclerotization situated posteriorly within atrium.

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Peru (Junín).

Paradysderina newtoni, new species
Figures 239–253

TYPES: Male holotype and female allotype from a Berlese sample of rainforest litter taken at an elevation of 1700 m at Cordillera Azul, 39 km NE Tingo María, Huánuco, Peru (Jan. 11, 1983; A. Newton, M. Thayer), deposited in FMNH (PBI_OON 545).

ETYMOLOGY: The specific name is a patronym in honor of Al Newton, one of the collectors of the types.

DIAGNOSIS: Males can be recognized by the fan-shaped, distally expanded embolus (figs. 249–253); females resemble those of *P. apurimac* but have conspicuous, paired posterolateral sclerotizations at the sides of the anterior genitalic process (figs. 242–244).

MALE (PBI_OON 545, figs. 245–253): Total length 1.69. Elevated portion of pars cephalica granulate. Chilum short, triangular. Anterior ledge on paturon with only slight, anteriorly directed tubercle. Endites anteriorly with two wide, clawlike processes, both basally widened. Leg spination: femur I p0-0-2; tibiae: I v4-4-1p, II v4-4-0; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus fan shaped, recumbent.

FEMALE (PBI_OON 545, figs. 239–244): Total length 1.76. Chilum very short. Postepigastric scutum covering about one-third of abdomen length, fused to epigastric scutum. Leg spination: femur I p0-0-2; tibiae: I v4-4-2, II v4-4-0; metatarsi: I v2-2-1p, II v2-2-0. Genital atrium very wide, with ovoid posterolateral sclerotizations; anterior genitalic process with W-shaped base.

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Peru (Huánuco).

Paradysderina thayerae, new species
Figures 254–267

TYPES: Male holotype, female allotype, and male paratype from a Berlese sample of litter taken at an elevation of 660 m at Cueva de las Lechuzas, Parque Nacional Tingo María, Huánuco, Peru (Jan. 8–13, 1983; A. Newton, M. Thayer), deposited in FMNH (44481, PBI_OON 10705).

ETYMOLOGY: The specific name is a patronym in honor of Margaret Thayer, one of the collectors of the types.

DIAGNOSIS: Males can easily be recognized by the four prongs on the embolus (figs. 258– 261), females by the long, triangular anterior genitalic process and diamond-shaped lateral genitalic sclerotizations (figs. 265–267).

MALE (PBI_OON 10705, figs. 254–261): Total length 1.44. Elevated portion of pars cephalica granulate. Chilum large, triangular. Anterior ledge on paturon with anteriorly directed, triangular projection at dorsomedian corner; inner margin flattened throughout paturon length but without distinct spines. Endites with dorsal process smaller than ventral process. Leg spination: femur I p0-0-2; tibiae: I v4-4-1p, II v4-4-0; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus with four prongs, second basalmost one much wider than others.

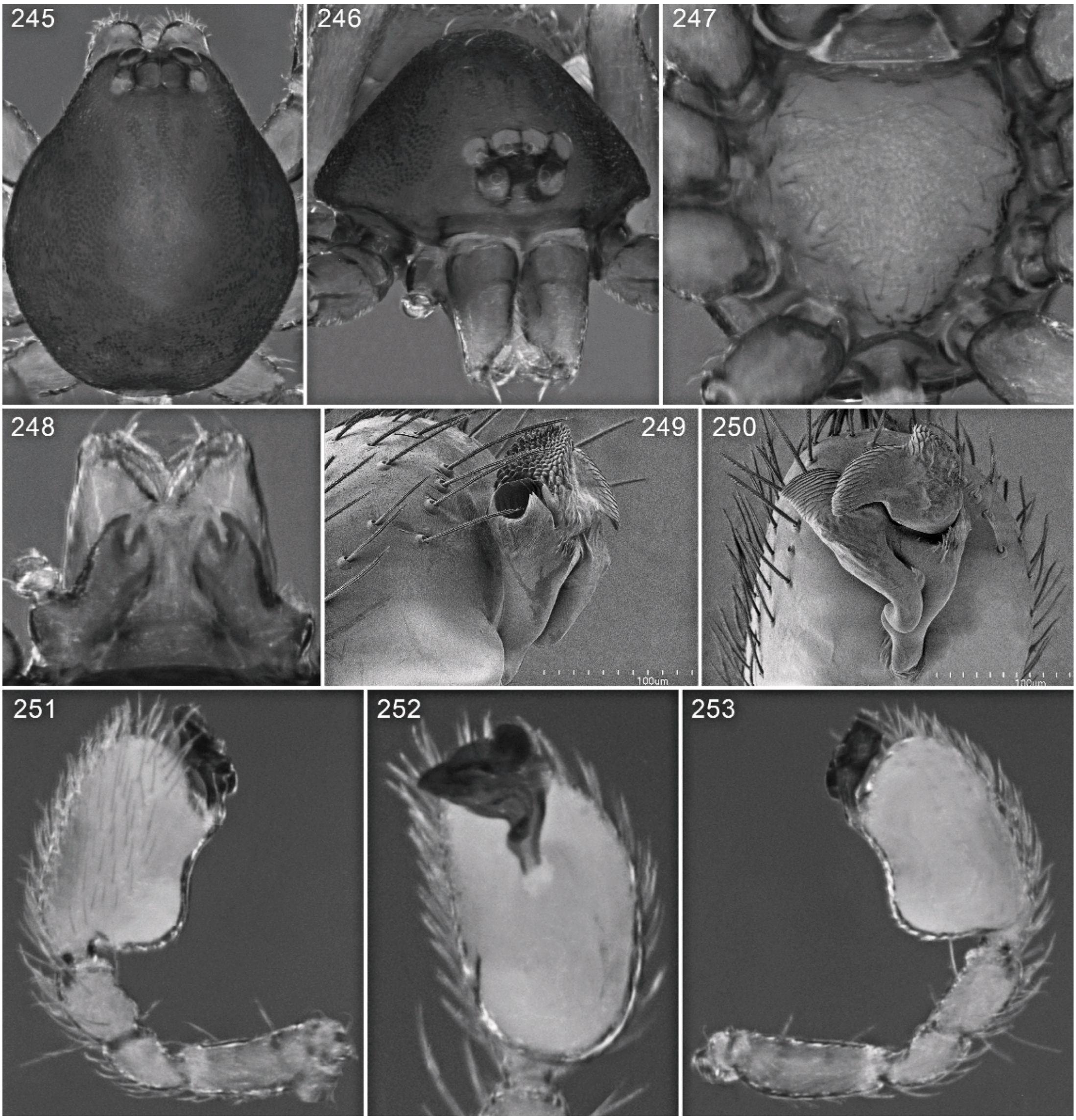
FEMALE (PBI_OON 10705, figs. 262–267): Total length 1.58. Chilum small. Postepigastric scutum only around epigastric furrow, not fused to epigastric scutum. Leg spination: femora: I p0-0-2, II p0-0-1; tibiae: I v4-4-2, II v4-4-1p; metatarsi I, II v2-2-1p. Genital atrium semicircular, with diamond-shaped lateral sclerotizations; anterior genitalic process greatly elongated, basally triangular.

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Peru (Huánuco).

Paradysderina carpish, new species
Figures 268–281

TYPES: Male holotype, female allotype, and two female paratypes from a Berlese sample of cloud forest litter taken at an elevation of 1920 m on the north side of Cerro Carpish, near Chinchao, Huánuco,



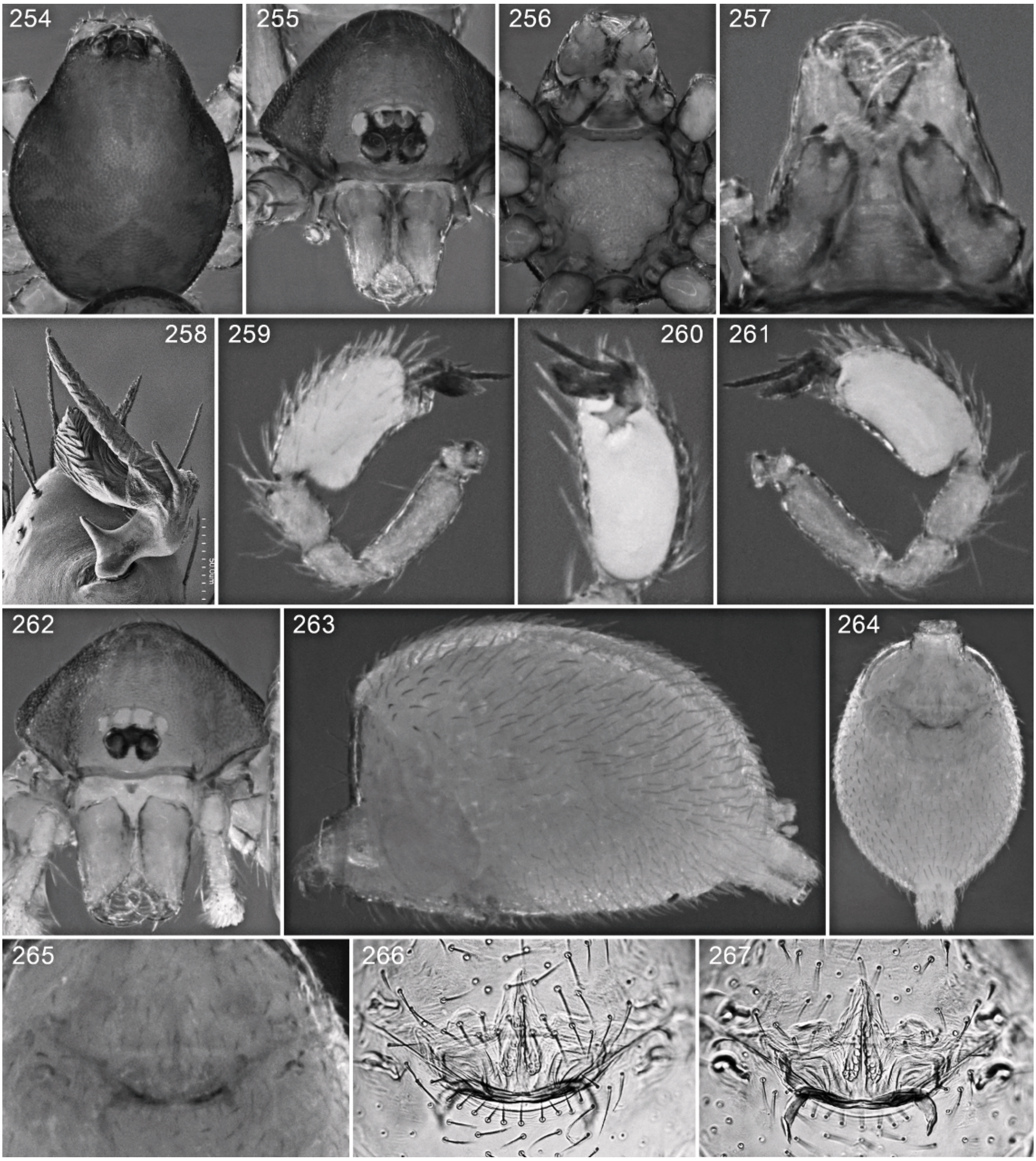
Figs. 245–253. *Paradysderina newtoni*, new species, male. **245.** Carapace, dorsal view. **246.** Same, anterior view. **247.** Sternum, ventral view. **248.** Mouthparts, ventral view. **249.** Left embolus, prolateral view. **250.** Same, ventral view. **251.** Left palp, prolateral view. **252.** Same, ventral view. **253.** Same, retrolateral view.

Peru (Jan. 12, 1983; A. Newton, M. Thayer), deposited in FMNH (PBI_OON 547).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

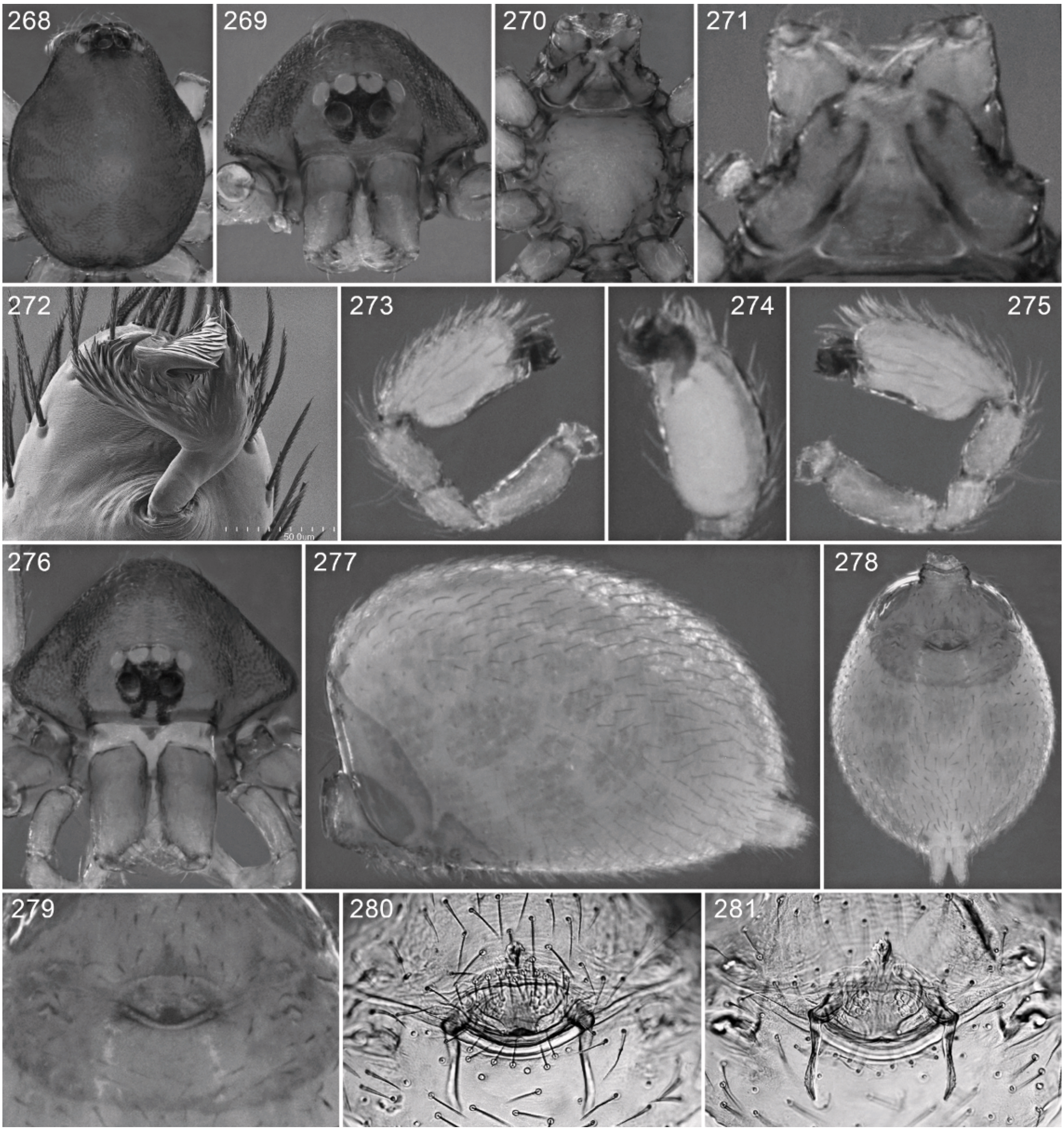
DIAGNOSIS: Males can be recognized by the distally expanded embolus bearing two prolateral, clawlike extensions (figs. 272–275), females by the bowl-shaped sclerotization around the anterior genitalic process (figs. 279–281).

MALE (PBI_OON 547, figs. 268–275): Total length 1.60. Elevated portion of pars cephalica granulate. Chilum medium-sized, distally rounded triangle. Anterior ledge on paturon with prominent, medially directed process, inner margin with short, heavily



Figs. 254–267. *Paradysderina thayerae*, new species, male (254–261) and female (262–267). **254.** Carapace, dorsal view. **255, 262.** Same, anterior view. **256.** Sternum, ventral view. **257.** Mouthparts, ventral view. **258.** Left embolus, ventral view. **259.** Left palp, prolateral view. **260.** Same, ventral view. **261.** Same, retrolateral view. **263.** Abdomen, lateral view. **264.** Same, ventral view. **265, 266.** Epigastric region, ventral view. **267.** Same, dorsal view.

sclerotized, dorsally directed spine situated near tip of chilum. Endites with ventral process much wider than dorsal process. Leg spination (leg II missing): femur I p0-0-2; tibia I v4-4-1p; metatarsus I v2-2-1p. Palps symmetrical; embolus with distal portion transverse, with two prolateral claw-shaped extensions.



Figs. 268–281. *Paradysderina carpish*, new species, male (268–275) and female (276–281). **268.** Carapace, dorsal view. **269, 276.** Same, anterior view. **270.** Sternum, ventral view. **271.** Mouthparts, ventral view. **272.** Left embolus, ventral view. **273.** Left palp, prolateral view. **274.** Same, ventral view. **275.** Same, retrolateral view. **277.** Abdomen, lateral view. **278.** Same, ventral view. **279, 280.** Epigastric region, ventral view. **281.** Same, dorsal view.

FEMALE (PBI_OON 547, figs. 276–281): Total length 1.77. Chilum small. Postepigastric scutum only around epigastric furrow, not fused to epigastric scutum. Leg spination: femora: I p0-0-2, II p0-0-1; tibiae: I v4-4-2, II v4-4-1p; metatarsi I, II v2-2-1p. Genital atrium ovoid; anterior genitalic process surrounded by bowl-shaped sclerotization; apodemes longer than atrium directed posteriorly.

OTHER MATERIAL EXAMINED: **Peru:** *Huánuco:* Cerro Carpish, N side, near

Chinchao, Jan. 12, 1983, Berlese, litter, elev. 2420 m (A. Newton, M. Thayer, FMNH 44481, PBI_OON 546), 1♀.

DISTRIBUTION: Peru (Huánuco).

Paradysderina rothae, new species
Figures 282–290

TYPE: Male holotype taken at an elevation of 9350 ft at Pataz, La Libertad, Peru (June 16, 1986; B. Roth), deposited in CAS (26301, PBI_OON 2592).

ETYMOLOGY: The specific name is a patronym in honor of Barbara Roth, collector of the holotype.

DIAGNOSIS: This relatively large male has an unusually small dorsal scutum (fig. 284) and a distinctively trifoil-shaped embolus (figs. 287–290).

MALE (PBI_OON 2592, figs. 282–290): Total length 2.08. Elevated portion of pars cephalica granulate. Chilum large, abruptly narrowed at about half its length. Anterior ledge of paturon with large, anteriorly directed median projection and smaller, lateral tubercle; inner margin with wide, flattened ridge culminating dorsally in heavily sclerotized spine. Endites with ventral projection wide, distally bifid, dorsal projection with blunt tip. Leg spination (leg I missing): tibia II v4-4-1p; metatarsus II v2-0-2. Palps symmetrical; embolus with three prongs, ventral one longest, bent at right angle at about half its length, dorsal prong only half length of median prong.

FEMALE: Unknown.

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Peru (La Libertad).

Paradysderina tabaconas, new species
Figures 291–304

TYPES: Male holotype and female allotype from Santuario Nacional Tabaconas-Namballe, Cajamarca, Peru (Mar. 2008; S. Castro), deposited in MELM (PBI_OON 14921).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males have a distinctively scoop-shaped embolus (figs. 295, 297); females have large, triangular anterior genitalic elements that extend far anterior of the anterior atrial margin (figs. 302–304).

MALE (PBI_OON 576, figs. 291–298): Total length 1.76. Elevated portion of pars cephalica appears reticulate. Chilum small, rectangular. Anterior ledge of paturon with dorsally directed projection on median edge; inner margin with long, heavily sclerotized spine. Endites anteriorly with two short, curved, clawlike processes. Leg spination: femur I p0-0-1; tibiae: I v4-4-0, II v3-4-0; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus scoop shaped.

FEMALE (PBI_OON 576, figs. 299–304): Total length 1.85. Chilum reduced to tiny triangle. Postepigastric scutum only around epigastric furrow, fused to epigastric scutum, seam present between posterior spiracles and lateral edge of scutum, but not between posterior spiracles. Leg spination: femora: I p0-0-2, II p0-0-1; tibiae: I v4-4-2, II v4-4-1p; metatarsi I, II v2-2-1p. Anterior process large, triangular, extending far anterior of anterior atrial ridge.

OTHER MATERIAL EXAMINED: **Peru:** *Cajamarca:* San Ignacio, Santuario Nacional Tabaconas-Namballe, Oct. 2007 (S. Castro, MELM PBI_OON 14919), 3♂, 8♀; Santuario Nacional Tabaconas-Namballe, Mar. 2008 (S. Castro, MELM, MACN, AMNH PBI_OON 576), 12♂, 16♀.

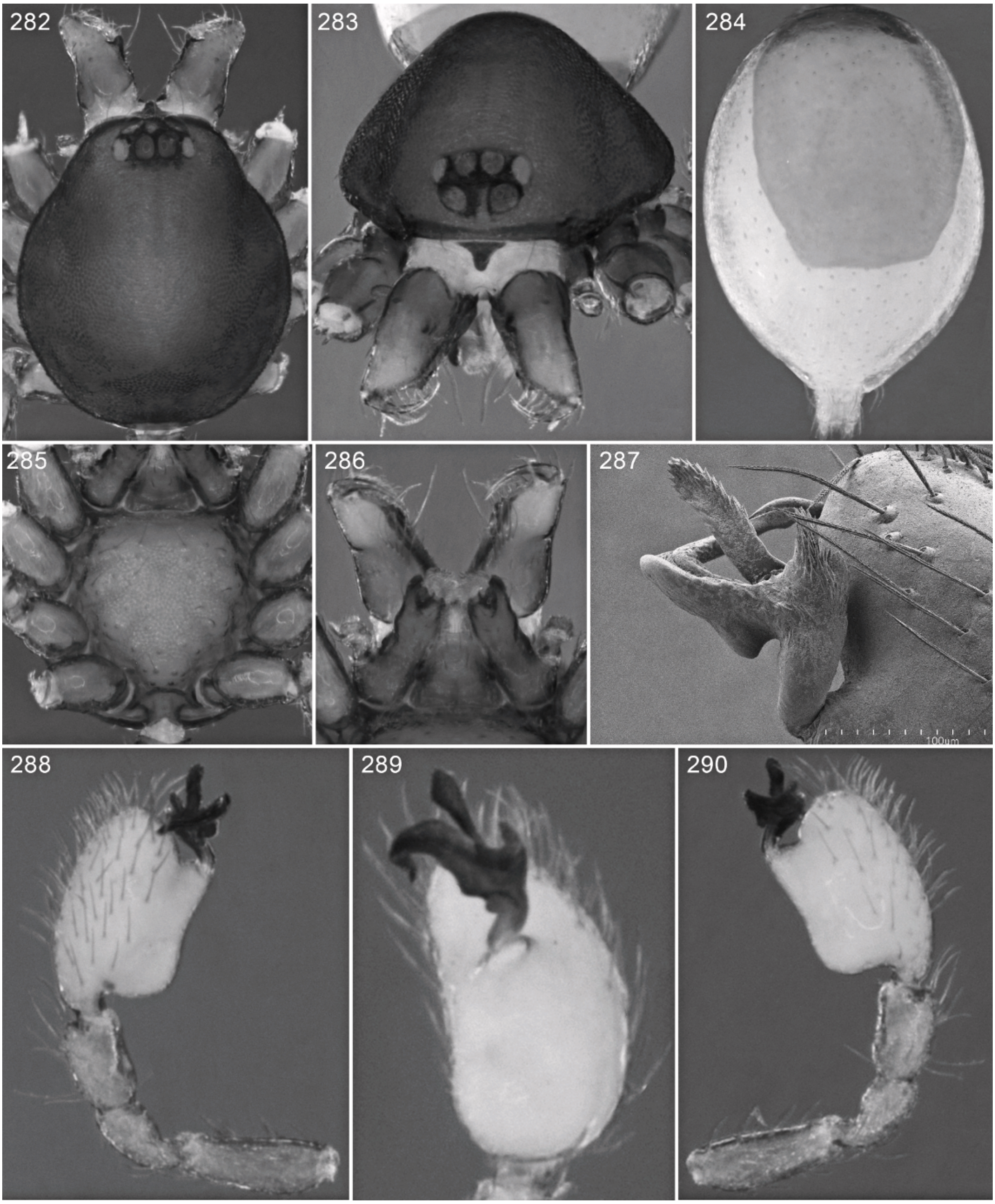
DISTRIBUTION: Peru (Cajamarca).

Paradysderina montana (Keyserling), new combination
Figures 305–318

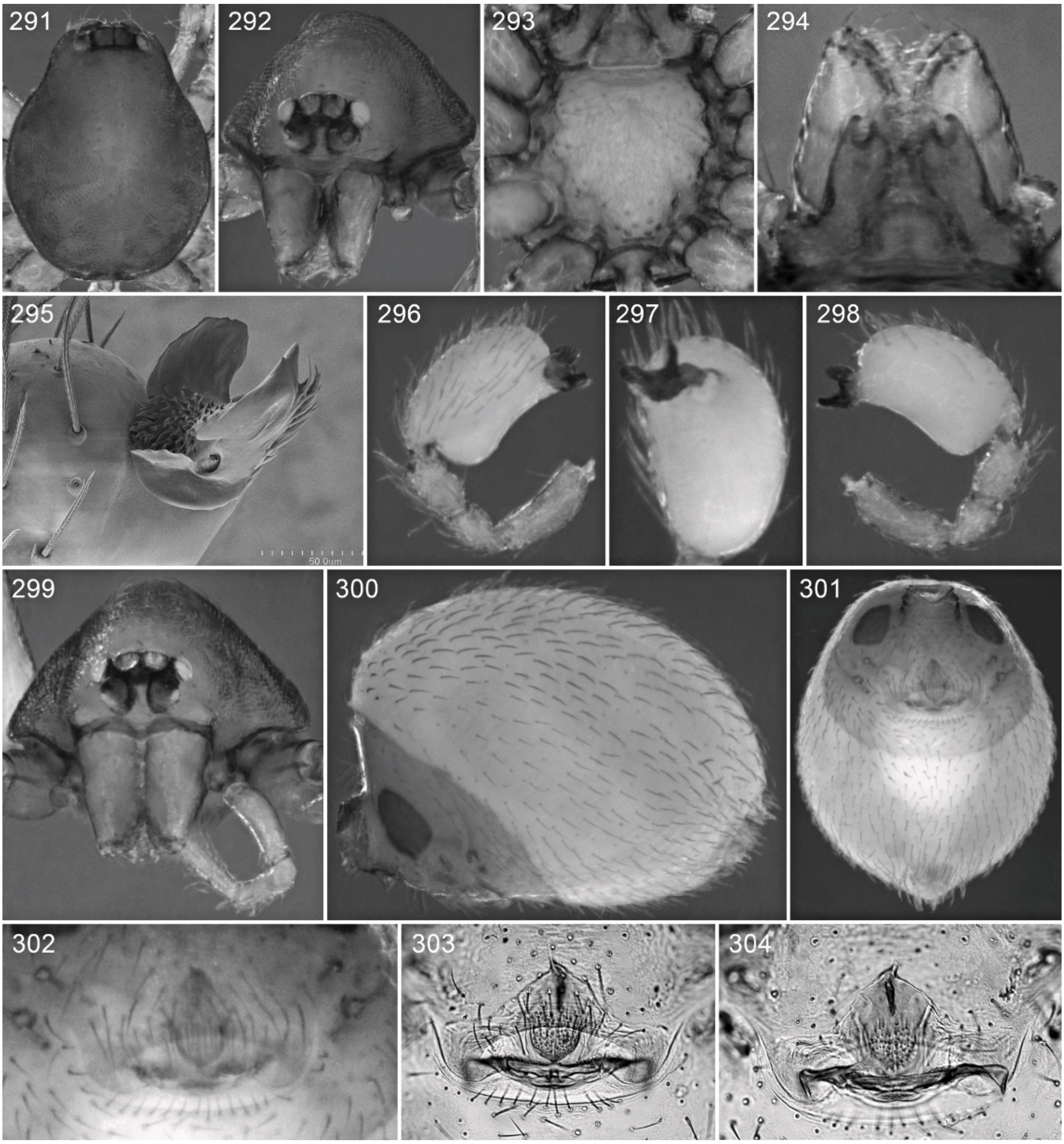
Oonops montanus Keyserling, 1883: 221, pl. 15, fig. 18 (female holotype from "Montana di Naucho," Peru, lost).

Dysderina montana: Petrunkevitch, 1911: 125.

NOTE: The female holotype was taken at an elevation of 8,000 ft at "Montana di Naucho"; according to Levi (1986: 159), this locality is in the mountains far enough east of Pacasmayo to be in Cajamarca, Peru. The type was said to be deposited in the collection of the University of Warsaw, but is not currently in that collection (Dominika Mierzwa, in litt.) or with the Keyserling material in BMNH, and is either lost or destroyed. Although Keyserling's description is brief, he thought the species to be closest to his species *Oonops globosus* (which is transferred to *Paradysderina* below), the sternum

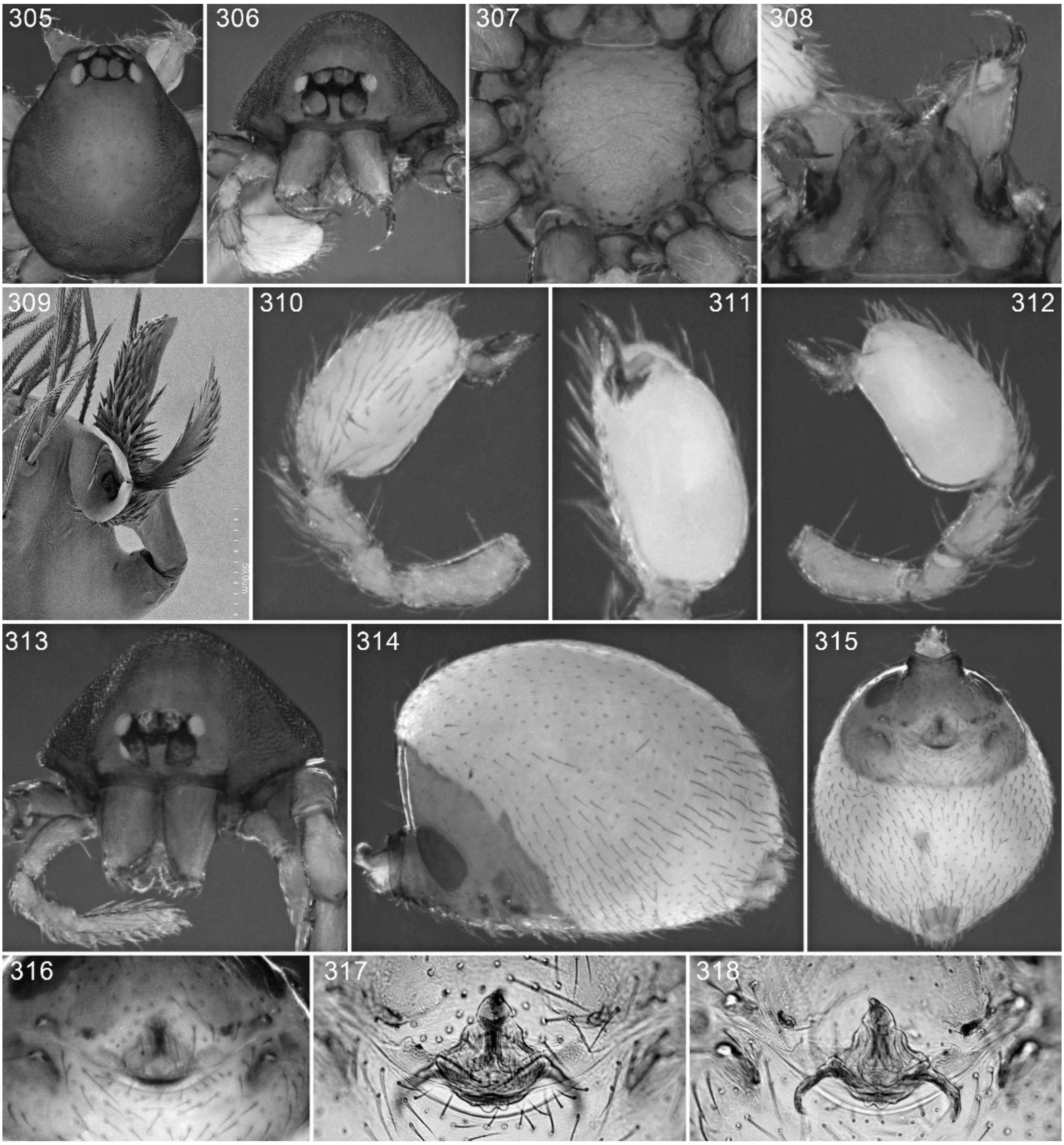


Figs. 282–290. *Paradysderina rothae,* new species, male. **282.** Carapace, dorsal view. **283.** Same, anterior view. **284.** Abdomen, dorsal view. **285.** Sternum, ventral view. **286.** Mouthparts, ventral view. **287.** Left embolus, retrolateral view. **288.** Left palp, prolateral view. **289.** Same, ventral view. **290.** Same, retrolateral view.



Figs. 291–304. *Paradysderina tabaconas,* new species, male (291–298) and female (299–304). **291.** Carapace, dorsal view. **292, 299.** Same, anterior view. **293.** Sternum, ventral view. **294.** Mouthparts, ventral view. **295.** Left embolus, retrolateral view. **296.** Left palp, prolateral view. **297.** Same, ventral view. **298.** Same, retrolateral view. **300.** Abdomen, lateral view. **301.** Same, ventral view. **302, 303.** Epigastric region, ventral view. **304.** Same, dorsal view.

is said to be fairly flat, the distance between the posterior border of the postepigastric furrow and the spinnerets is said to be twice the length of the postepigastric scutum, and Keyserling's genitalic figure suggests that an epigastric ridge is present anterior to the genital atrium. All these features suggest strongly that Keyserling's specimen belongs to *Paradysderina*; we have chosen to assign the name to this species from Cajamarca, as it is the species known today from this area that most closely resembles Keyserling's figure.



Figs. 305–318. *Paradysderina montana* (Keyserling), male (305–312) and female (313–318). **305.** Carapace, dorsal view. **306, 313.** Same, anterior view. **307.** Sternum, ventral view. **308.** Mouthparts, ventral view. **309.** Left embolus, retrolateral view. **310.** Left palp, prolateral view. **311.** Same, ventral view. **312.** Same, retrolateral view. **314.** Abdomen, lateral view. **315.** Same, ventral view. **316, 317.** Epigastric region, ventral view. **318.** Same, dorsal view.

DIAGNOSIS: This species is sympatric with *P. tabaconas*; males can easily be distinguished by the more elongate embolus (figs. 309, 311), females by the narrower anterior genitalic elements (figs. 317, 318).

MALE (PBI_OON 14918, figs. 305–312): Total length 1.97. Elevated portion of pars cephalica appears reticulate. Chilum small, triangular. Anterior ledge on paturon with only slight indication of tubercle on inner edge, inner margin flattened but with only slight anterior spine. Endites with dorsal process longer than ventral process. Leg spination: femur I p0-0-2; tibiae: I v4-4-1p, II v4-4-0; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus with basal portion directed ventrally, distal portion with two sharply pointed prongs.

FEMALE (PBI_OON 14918, figs. 313–318): Total length 1.83. Postepigastric scutum covering about one-third of abdomen length, fused to epigastric scutum. Leg spination: femur I p0-0-2; tibiae I, II v4-4-1p; metatarsi I, II v2-2-1p. Posterior margin of genitalic atrium rebordered; anterior genitalic process relatively short, wide, originating from oval base.

MATERIAL EXAMINED: **Peru:** *Cajamarca:* San Ignacio, Santuario Nacional Tabaconas-Namballe, Oct. 2007 (S. Castro, MELM PBI_OON 14918), 3♂, 3♀; Santuario Nacional Tabaconas-Namballe, Mar. 2008 (S. Castro, MELM, MACN, AMNH PBI_OON 14828, 14912), 16♂, 7♀.

DISTRIBUTION: Peru (Cajamarca).

Paradysderina sauce, new species
Figures 319–327

TYPE: Male holotype taken at an elevation of 1500 m at San Ignacio, El Sauce, Cajamarca, Peru (Apr. 16, 2003; R. Acosta), deposited in MELM (PBI_OON 14920).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males have the femora and the basal half of the leg tibiae darkened, and a distinctively long, narrow embolus (figs. 324, 326).

MALE (PBI_OON 14920, figs. 319–327): Total length 2.12. Elevated portion of pars cephalica granulate. Chilum tiny, triangular. Anterior ledge of paturon with slight tubercle at inner edge, paturon medially excavated from that point to near fang base, with ventrally situated, dorsally direct spine. Endites with ventral process longer than dorsal process. Leg spination: femur I p0-0-2; tibiae: I v4-4-2, II v4-4-1p; metatarsi: I v2-2-2, II v2-2-0. Palps symmetrical; embolus long, narrow, widened at about one-fourth its length, narrowed at about one-half its length.

FEMALE: Unknown.

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Peru (Cajamarca).

Paradysderina piura, new species
Figures 328–340

TYPES: Male holotype and female allotype from Tambo, Piura, Peru (July 5, 2006; M. Deza), deposited in MELM (PBI_OON 14819).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males have the base of the embolus widened and directed prolaterally, and the distal portion sinuous (figs. 331–334); females have a large, triangular genital atrium (figs. 338–340).

MALE (PBI_OON 14819, figs. 328–334): Total length 1.66. Elevated portion of pars cephalica appears reticulate. Chilum tiny, triangular. Anterior ledge of paturon with slight tubercle at inner edge. Endites with dorsal, ventral processes subequal in length, width. Leg spination: femur I p0-0-2; tibiae: I v4-4-1p, II v3-4-0; metatarsi: I v2-2-1p, II v2-0-2. Palps symmetrical; embolar base elongated, subproximally widened, proximal portion with small, dorsally directed projection, distal portion sinuous.

FEMALE (PBI_OON 14819, figs. 335–340): Total length 2.35. Postepigastric scutum only around epigastric furrow, fused to epigastric scutum. Leg spination: femora: I p0-0-2, r0-1-2, II p0-0-2, r0-1-0; tibiae: I v4-4-2, II v4-4-1p; metatarsi I, II v2-2-1p. Genital atrium triangular, anterior process originating at about half of atrial length, with V-shaped base; apodemes greatly widened, triangular.

OTHER MATERIAL EXAMINED: None.

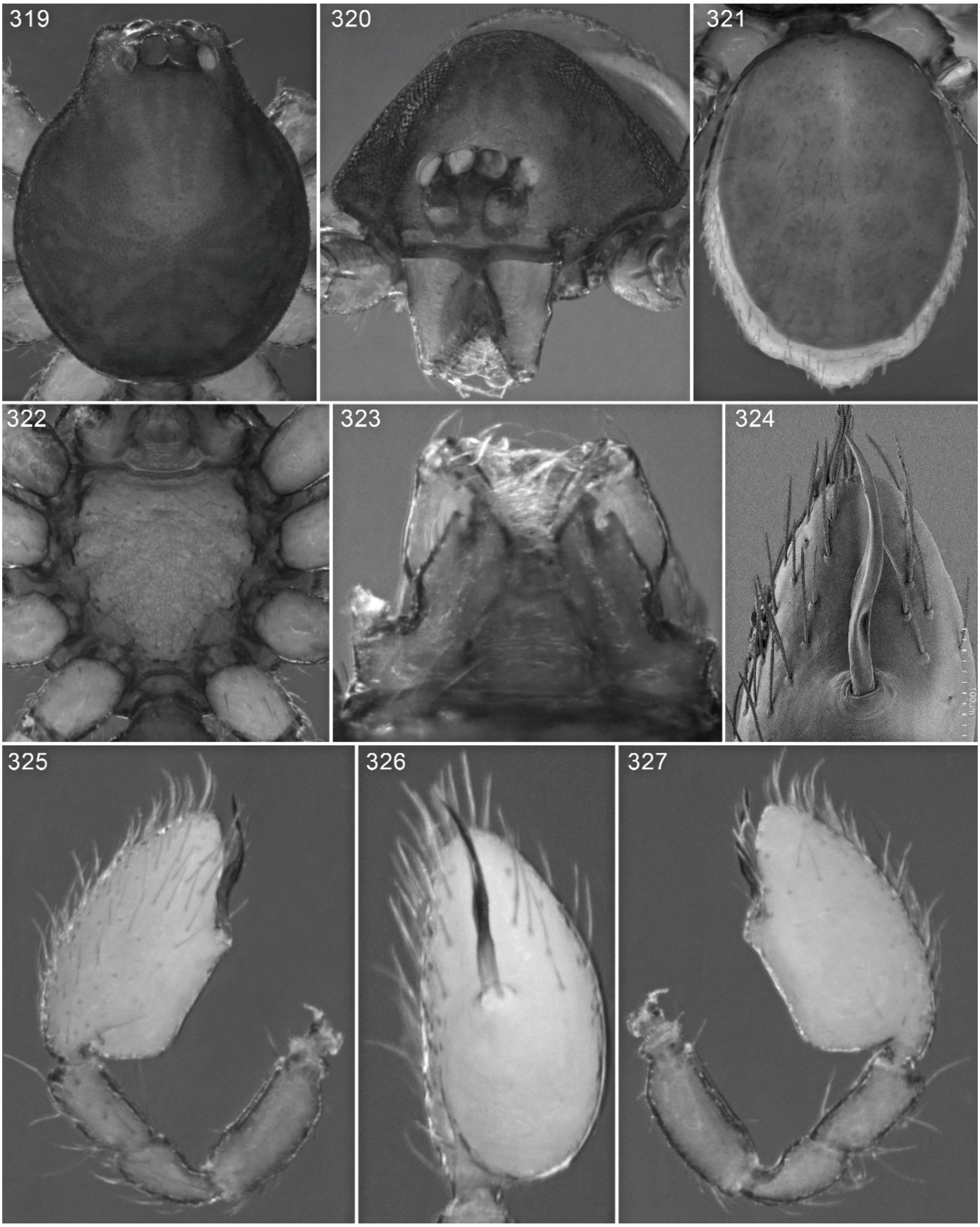
DISTRIBUTION: Peru (Piura).

Paradysderina tambo, new species
Figures 341–348

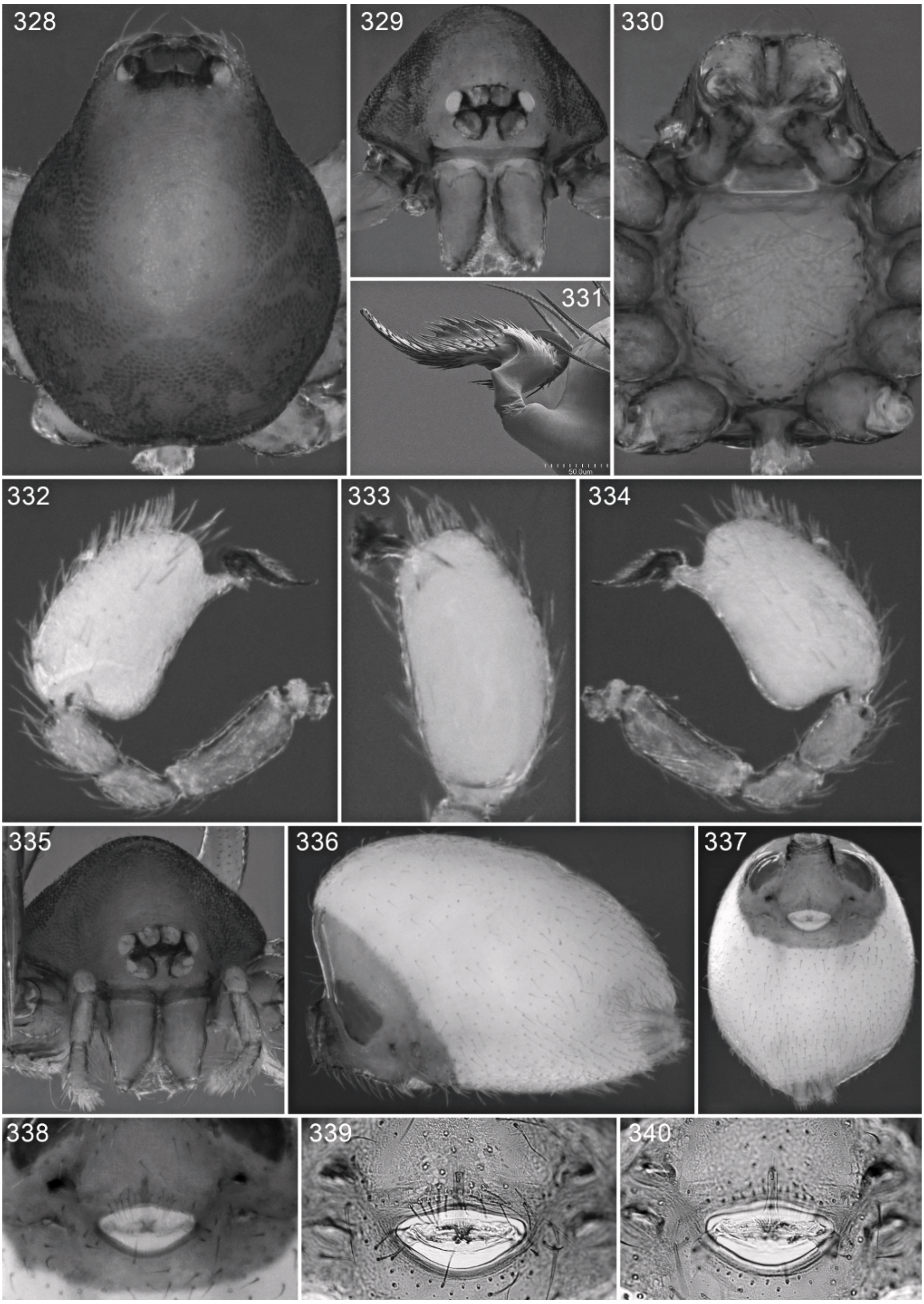
TYPE: Male holotype from Tambo, Piura, Peru (July 5, 2006; M. Deza), deposited in MELM (PBI_OON 644).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males have a basally narrow, distally curled embolus (figs. 345–348).



Figs. 319–327. *Paradysderina sauce,* new species, male. **319.** Carapace, dorsal view. **320.** Same, anterior view. **321.** Abdomen, dorsal view. **322.** Sternum, ventral view. **323.** Mouthparts, ventral view. **324.** Left embolus, ventral view. **325.** Left palp, prolateral view. **326.** Same, ventral view. **327.** Same, retrolateral view.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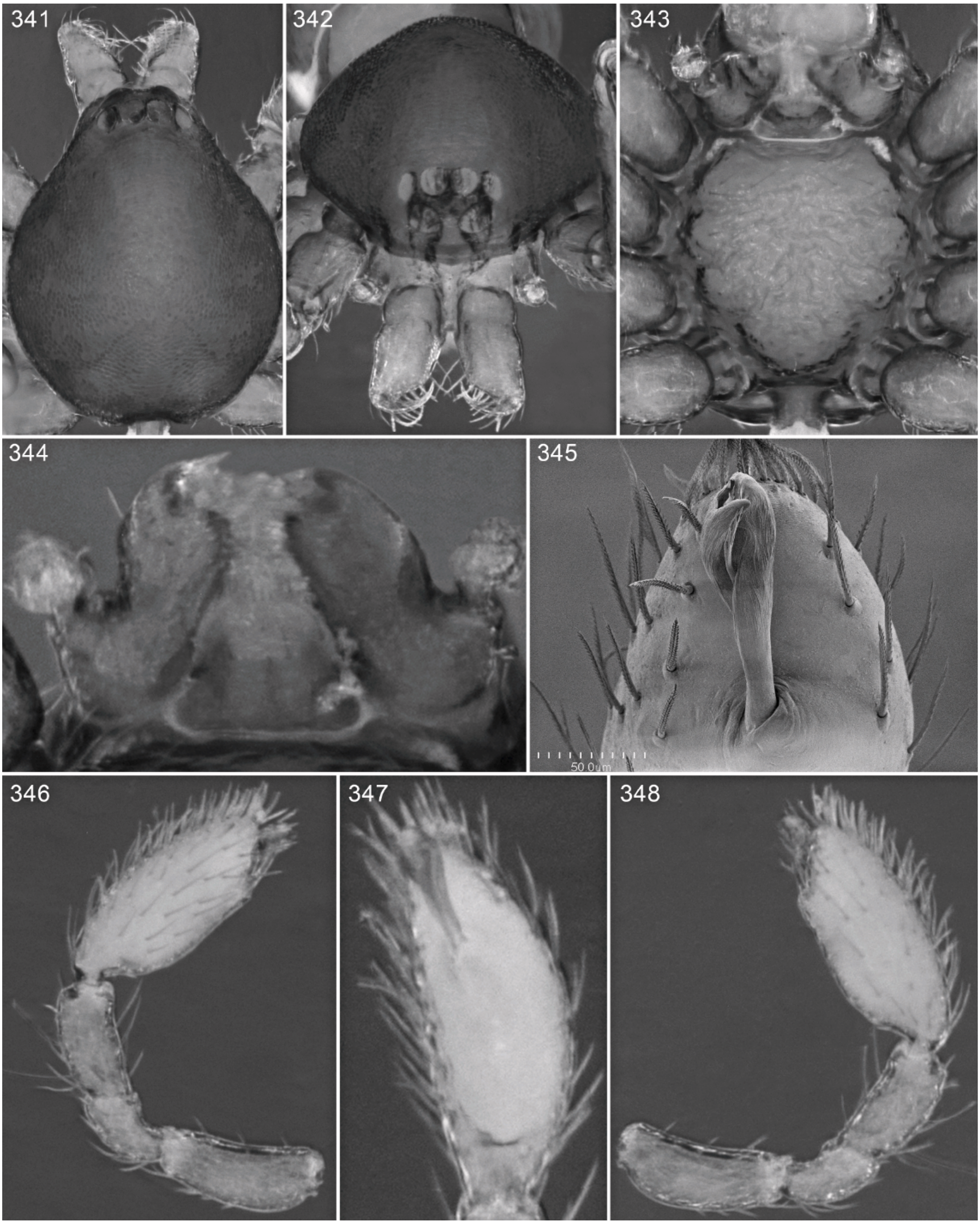
Figs. 328–340. *Paradysderina piura*, new species, male (328–334) and female (335–340). **328.** Carapace, dorsal view. **329, 335.** Same, anterior view. **330.** Sternum and mouthparts, ventral view. **331.** Left embolus, retrolateral view. **332.** Left palp, prolateral view. **333.** Same, ventral view. **334.** Same, retrolateral view. **336.** Abdomen, lateral view. **337.** Same, ventral view. **338, 339.** Epigastric region, ventral view. **340.** Same, dorsal view.



Figs. 341–348. *Paradysderina tambo,* new species, male. **341.** Carapace, dorsal view. **342.** Same, anterior view. **343.** Sternum, ventral view. **344.** Mouthparts, ventral view. **345.** Left embolus, ventral view. **346.** Left palp, prolateral view. **347.** Same, ventral view. **348.** Same, retrolateral view.

MALE (PBI_OON 644, figs. 341–348): Total length 1.98. Elevated portion of pars cephalica granulate. Chilum tiny, triangular. Anterior ledge of paturon with slight tubercle on inner margin, inner margin with slightly darkened spine at dorsal tip. Endites with ventral process wide, short, dorsal process with medially directed tip. Leg spination: femora: I p0-0-2, r0-1-1, II p0-0-2; tibiae: I v4-4-2, II v4-4-1p; metatarsi: I v2-2-1p, II v2-0-2. Palps symmetrical; embolus relatively short, distally curled; bulb relatively narrow.

FEMALE: Unknown.

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Peru (Piura).

Paradysderina fatima, new species

Figures 349–356

TYPE: Female holotype taken at an elevation of 450 m at Fátima, on road between Bagua and Imaza, near Chinganza, Amazonas, Peru (Dec. 24–25, 1991; P. Goloboff, Santiesteban, J. McHugh), deposited in AMNH (PBI_OON 101).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Females resemble those of *P. carpish* but have the genitalic apodemes directed obliquely rather than posteriorly (figs. 354–356). Differences in carapace and sternal sculpturing make it unlikely that this could be the female of *P. yasua*, *P. tambo*, *P. sauce*, *P. macho*, or *P. lostayos*; differences in size make it unlikely that this could be the female of *P. rothae*, and the other species known only from males are geographically too remote to be likely matches.

MALE: Unknown.

FEMALE (PBI_OON 101, figs. 349–356): Total length 1.65. Elevated portion of pars cephalica granulate. Chilum tiny, triangular. Postepigastric scutum only around epigastric furrow, fused to epigastric scutum. Leg spination: femora: I p0-0-2, II p0-0-1; tibiae I, II v4-4-1p; metatarsi: I v2-2-1p, II v2-2-0. Genital atrium semicircular, posterior portion with median, triangular sclerotization, apodemes directed posterolaterally.

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Peru (Amazonas).

Paradysderina bagua, new species

Figures 357–369

TYPES: Male holotype and female allotype taken at an elevation of 350 m at Montenegro, Bagua, Amazonas, Peru (Sept. 29–Oct. 1, 1963; Herrer, P. Wygodzinsky), deposited in AMNH (PBI_OON 1856).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males can be recognized by the straight, distally expanded embolus (figs. 360–363), females by the wide, semicircular base of the anterior genitalic process (figs. 367–369).

MALE (PBI_OON 1856, figs. 357–363): Total length 1.40. Elevated portion of pars cephalica granulate. Chilum small, triangular. Paturon with large, laterally directed projections at outer side of anterior ledge. Endites with ventral process wide, rounded, dorsal process narrow, pointed. Leg spination: femur I p0-0-1; tibiae: I v4-4-0, II v3-2-0; metatarsi: I v2-2-1p, II v2-0-2. Palps symmetrical; embolus short, straight, widened distally.

FEMALE (PBI_OON 1856, figs. 364–369): Total length 1.47. Chilum tiny. Postepigastric scutum only around epigastric furrow, fused to epigastric scutum. Leg spination: femora: I p0-0-2; r0-0-1, II p0-0-1; r0-0-1; tibiae: I v4-4-2, II v4-4-1p; metatarsi I, II v2-2-1p. Anterior genitalic process very narrow, originating from square base situated at posterior margin of atrium, with recurved tip.

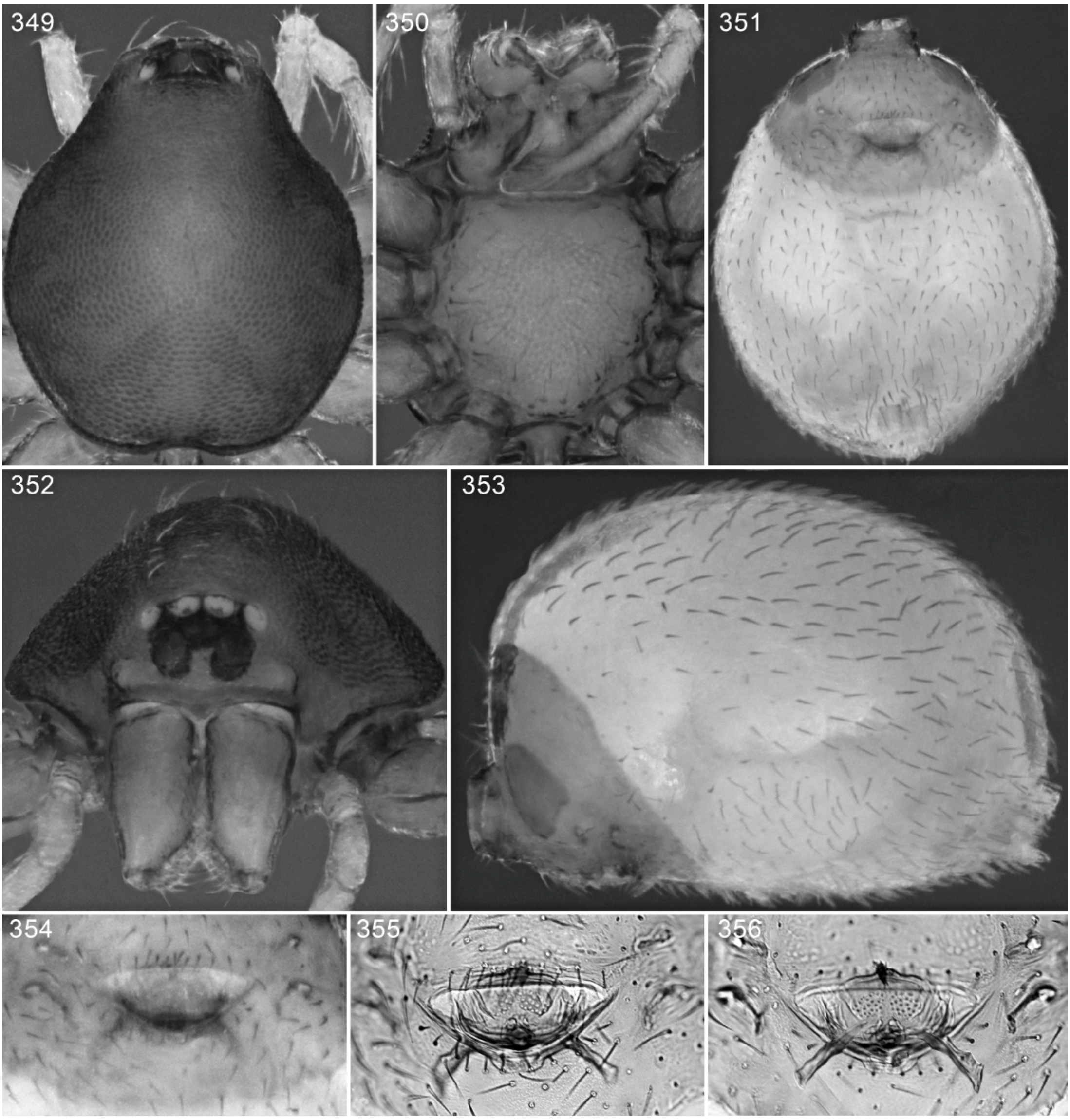
OTHER MATERIAL EXAMINED: **Peru:** *Amazonas:* Fátima, on road between Bagua and Imaza, near Chinganza, Dec. 24–25, 1991, elev. 450 m (P. Goloboff, Santiesteban, J. McHugh, AMNH PBI_OON 26350), 1♂. *Loreto:* Pithecia, Río Samirea, 05°15′S, 74°40′W, May–June, 1990, fogging, elev. 130 m (T. Erwin et al., MUSM PBI_OON 40808), 1♂.

DISTRIBUTION: Peru (Amazonas, Loreto).

Paradysderina yasua, new species

Figures 370–377

TYPE: Male holotype taken under bark at the Yasua Indian village, at the headwaters of the Río Loreto Yacú, Loreto, Peru (Apr.



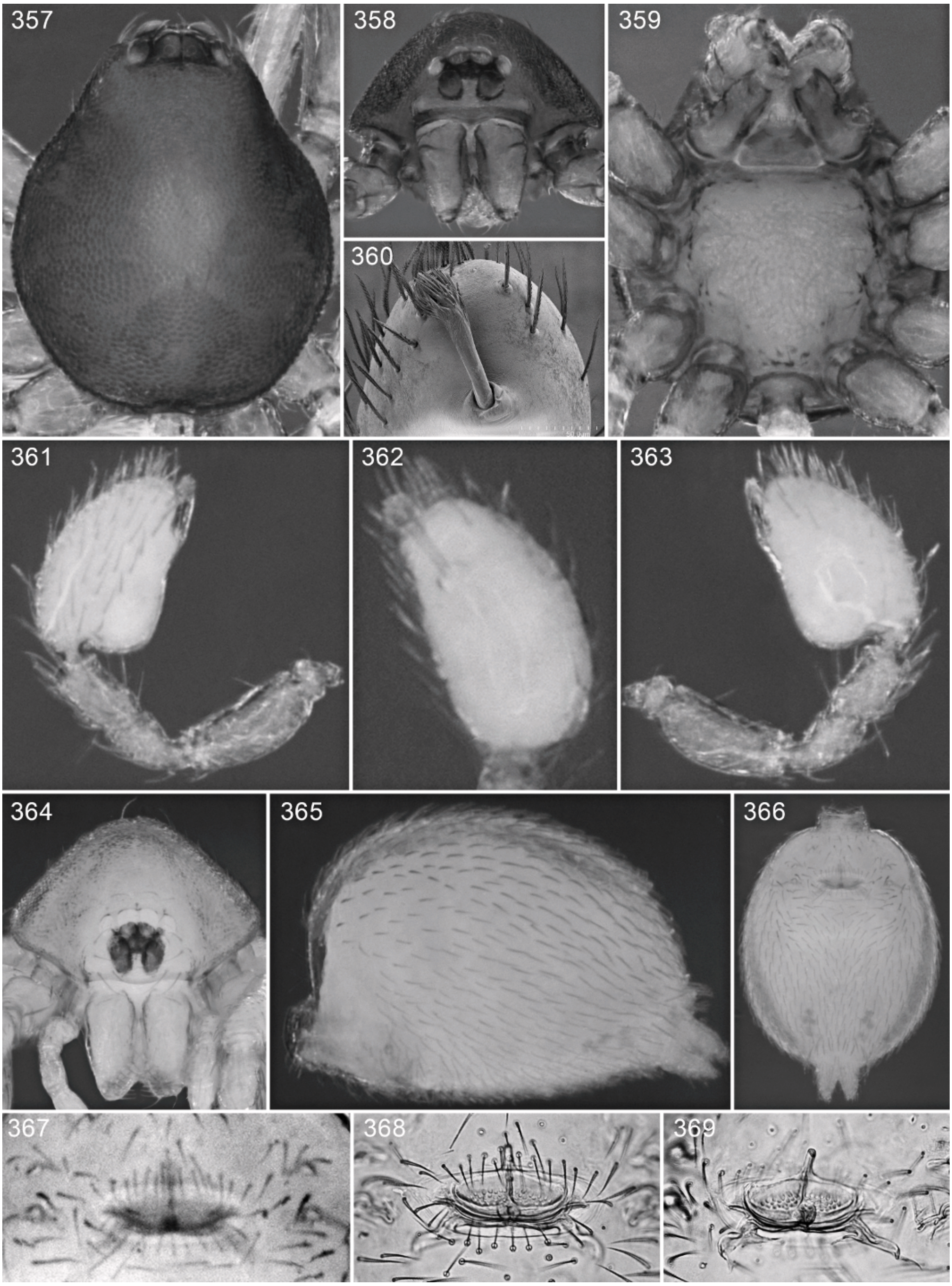
Figs. 349–356. *Paradysderina fatima,* new species, female. **349.** Carapace, dorsal view. **350.** Sternum and mouthparts, ventral view. **351.** Abdomen, ventral view. **352.** Carapace, anterior view. **353.** Abdomen, lateral view. **354, 355.** Epigastric region, ventral view. **356.** Same, dorsal view.

30, 1970; B. Malkin), deposited in FMNH (33574, PBI_OON 10081).

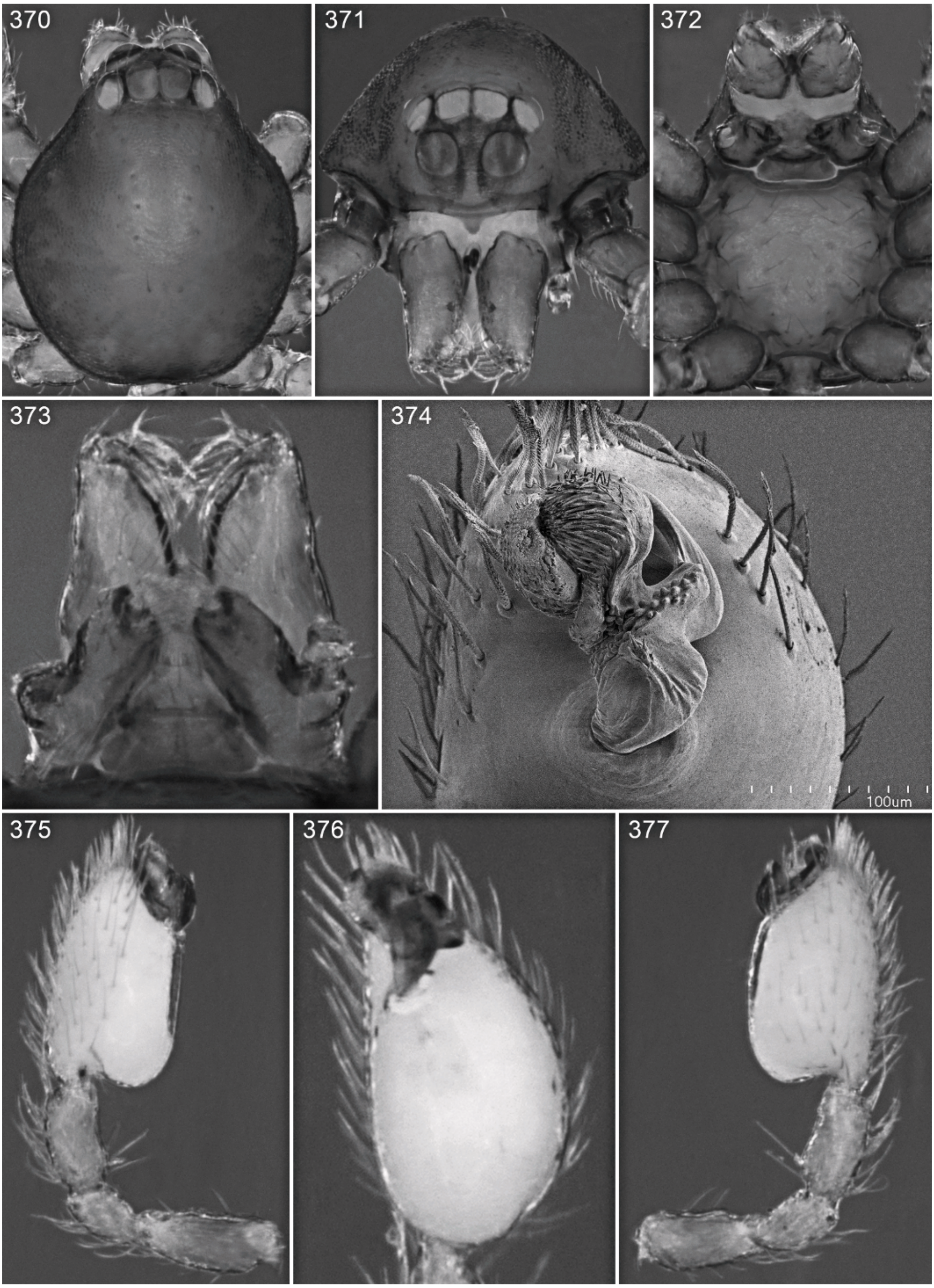
ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males can be recognized by the spines originating in the soft cuticle between the chelicerae (fig. 371) and the elaborate shape of the embolus (figs. 374–377).

MALE (PBI_OON 10081, figs. 370–377): Total length 1.68. Elevated portion of pars cephalica appears reticulate. Chilum medium sized, triangular. Anterolateral ledge on paturon with tiny, dark tubercle at ventral end of inner surface; soft cuticle between chelicerae bearing pair of small, heavily sclerotized, ventrally directed spines. Endites with ventral process wide, short, tip directed



Figs. 357–369. *Paradysderina bagua*, new species, male (357–363) and female (364–369). **357.** Carapace, dorsal view. **358, 364.** Same, anterior view. **359.** Sternum and mouthparts, ventral view. **360.** Left embolus, ventral view. **361.** Left palp, prolateral view. **362.** Same, ventral view. **363.** Same, retrolateral view. **365.** Abdomen, lateral view. **366.** Same, ventral view. **367, 368.** Epigastric region, ventral view. **369.** Same, dorsal view.



Figs. 370–377. *Paradysderina yasua,* new species, male. **370.** Carapace, dorsal view. **371.** Same, anterior view. **372.** Sternum, ventral view. **373.** Mouthparts, ventral view. **374.** Left embolus, ventral view. **375.** Left palp, prolateral view. **376.** Same, ventral view. **377.** Same, retrolateral view.

anteriorly, dorsal process narrow, short, tip directed medially. Leg spination: femur I p0-0-1; tibiae: I v4-4-0, II v4-2-0; metatarsi: I v2-2-0, II v2-0-2. Palps symmetrical; embolus ventral flange forming functional conductor to narrow dorsal flange.

FEMALE: Unknown.

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Peru (Loreto).

Paradysderina loreto, new species
Figures 378–385, 399–406

TYPE: Female holotype from Río Samiria, ca. 05°07′S, 75°28′W, Loreto, Peru (May–June 1990; T. Erwin, D. Silva), deposited in MUSM (PBI_OON 549).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Both sexes can easily be recognized by their sternum, which is strongly granulated and more deeply incised than that of any of their congeners (figs. 379, 402). Males resemble those of *P. pithecia* but have a larger embolar tip (figs. 403–406); females resemble those of *P. convencion* but have an anteriorly much less expanded and much less heavily sclerotized anterior genitalic process (figs. 383–385).

MALE (PBI_OON 736, figs. 399–406): Total length 2.11. Elevated portion of pars cephalica granulate. Chilum rounded, triangular. Anterior ledge of paturon with pointed tubercle at inner margin, inner margins with small, dorsally directed spine. Endites with ventral process much wider than dorsal process. Leg spination: femora: I p0-0-2, r0-1-1, II p0-0-2, r0-1-0; tibiae: I v4-4-2, II v4-4-1p; metatarsi: I v2-2-2, II v2-2-1p. Palps symmetrical, embolus sharply bent, with conspicuous prolateral notch, tip large, triangular.

FEMALE (PBI_OON 549, figs. 378–385): Total length 2.27. Postepigastric scutum covering about one-third of abdomen length, fused to epigastric scutum. Leg spination: femora I, II p0-0-2; r0-1-1; tibiae I, II v4-4-2; metatarsi: I v2-2-2, II v2-2-1p. Atrium semicircular, narrow anterior process originating from small median sclerotization at posterior margin of atrium.

OTHER MATERIAL EXAMINED: **Brazil:** *Amazonas:* Igarapé Belém, near Rio Solimões, about 70 km E Leticia [Colombia], May 18–28, 1970 (B. Malkin, FMNH 56890, PBI_OON 10833), 1♀. **Peru:** *Loreto:* Pithecia, 05°11′S, 72°42′W, May 13–30, 1990, fogging (T. Erwin, D. Silva, MUSM PBI_OON 736), 1♂.

DISTRIBUTION: Peru (Loreto) and adjacent Brazil.

Paradysderina pithecia, new species
Figures 386–398

TYPE: Male holotype taken by fogging at Pithecia, Río Samiria, 05°15′S, 74°40′W, Loreto, Peru (May–June 1990; T. Erwin et al.), deposited in MUSM (PBI_OON 40809).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

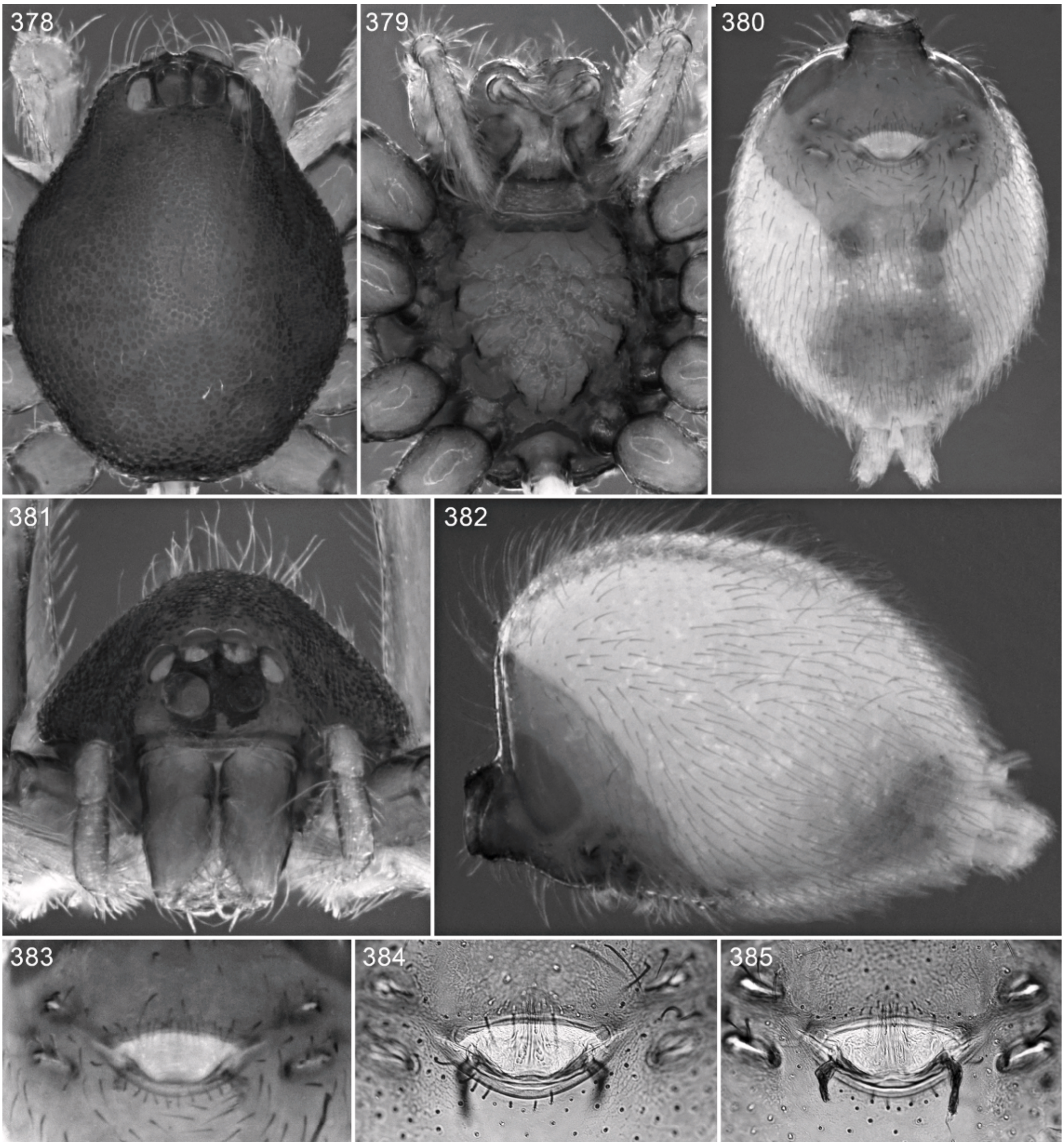
DIAGNOSIS: Males can be recognized by the abruptly bent embolar tip (figs. 389–392); females resemble those of *P. thayerae* in having a long, triangular anterior genitalic process, but lack the distinct lateral atrial sclerotizations found in that species (figs. 396–398).

MALE (PBI_OON 40809, figs. 386–392): Total length 1.49. Elevated portion of pars cephalica granulate. Chilum tiny, triangular. Anterior ledge of paturon with only slight tubercle at inner margin, inner margin with pair of dark, heavily sclerotized, dorsally directed spines. Endites with ventral process wide, short, dorsal process narrow, short. Leg spination: femur I p0-0-2; tibiae: I v4-4-0, II v4-2-0; metatarsi: I v2-2-0, II v2-0-0. Palps symmetrical; embolus distally bifid, with sharply pointed, narrow, straight distal prong.

FEMALE (PBI_OON 548, figs. 393–398): Total length 1.86. Postepigastric scutum only around epigastric furrow, not fused to epigastric scutum. Leg spination: femora: I p0-0-2; r0-1-2, II p0-0-2; r0-2-0; tibiae: I v4-4-2, II v4-4-1p; metatarsi: I v2-2-2, II v2-0-2. Atrium ovoid, anterior process with enlarged base occupying about half of atrial width.

OTHER MATERIAL EXAMINED: **Peru:** *Loreto:* Río Samiria, ca. 05°08′S, 75°11′W, May–June, 1990, fogging (T. Erwin, D. Silva, MUSM PBI_OON 548), 5♀.

DISTRIBUTION: Peru (Loreto).



Figs. 378–385. *Paradysderina loreto,* new species, female. **378.** Carapace, dorsal view. **379.** Sternum and mouthparts, ventral view. **380.** Abdomen, ventral view. **381.** Carapace, anterior view. **382.** Abdomen, lateral view. **383, 384.** Epigastric region, ventral view. **385.** Same, dorsal view.

KEY TO SPECIES FROM ECUADOR

1. Males (those of *hermani*, *yasuni*, and *sucumbios* unknown) 2
– Females (those of *lostayos* unknown) . . . 13
2. Chelicerae with long anterior projections (figs. 566, 567) . . . . *dracula*
– Chelicerae without such projections 3
3. Clypeus with pair of anterior projections (fig. 545). . . . . *vlad*
– Clypeus without such projections 4
4. Palps asymmetrical 5
– Palps symmetrical 7
5. Left palpal bulb not expanded (figs. 483, 484) . . . . *righty*
– Left palpal bulb expanded 6

6. Right palpal bulb not expanded (figs. 535, 536) . . . . *lefty*
– Right palpal bulb partially expanded (figs. 519, 520) . . . . *fusiscuta*
7. Embolus extending far beyond bulb (figs. 426, 456, 470) 8
– Embolus not extending far beyond bulb. . . 10
8. Embolus greatly widened distally (figs. 424, 426) . . . . *lostayos*
– Embolus otherwise 9
9. Embolus narrowed distally (figs. 468, 470) . . . . *baehrae*
– Embolus not narrowed distally (figs. 454, 456) . . . . *yanayacu*
10. Embolus with subdistal retrolateral expansion (figs. 412, 434, 585) 11
– Embolus without retrolateral expansion (figs. 499, 501) . . . . *centro*
11. Chelicerae deeply excavated (figs. 408, 429) 12
– Chelicerae not deeply excavated (fig. 581) . . . . *pecki*
12. Middle portion of embolus straight (figs. 432, 434) . . . . *puyo*
– Middle portion of embolus curved (fig. 412) . . . . *zamora*
13. Abdomen with small dorsal scutum (fig. 522) . . . . *fusiscuta*
– Abdomen without dorsal scutum 14
14. Postepigastric scutum separated from epigastric scutum at sides (as in fig. 446) 15
– Postepigastric scutum fused to epigastric scutum 18
15. Genitalic apodemes relatively short (figs. 419, 565) 16
– Genitalic apodemes relatively long (figs. 449, 579) 17
16. Genitalia with median sclerotization (figs. 563, 564) . . . . *yasuni*
– Genitalia without median sclerotization (figs. 417, 418) . . . . *zamora*
17. Postepigastric scutum greatly shortened at middle (fig. 444) . . . . *hermani*
– Postepigastric scutum otherwise (fig. 575) . . . . *dracula*
18. Postepigastric scutum relatively short (figs. 460, 474, 492) 19
– Postepigastric scutum relatively long (as in figs. 438, 505, 540) 21
19. Genitalic apodemes relatively long (figs. 462, 463) . . . . *yanayacu*
– Genitalic apodemes relatively short (figs. 477, 495) 20
20. Anterior genitalic process extending anterior of anterior spiracles (figs. 475, 477) . . . *baehrae*
– Anterior genitalic process shorter (figs. 494, 495) . . . . *righty*
21. Genitalia with large median sclerotization (figs. 557, 592, 600) 22
– Genitalia without such a sclerotization . . 24
22. Genitalic sclerotization rectangular (figs. 590, 591) . . . . *pecki*
– Genitalic sclerotization otherwise 23
23. Genitalic sclerotization abruptly narrowed anteriorly (fig. 599) . . . . *sucumbios*
– Genitalic sclerotization gradually narrowed anteriorly (fig. 556) . . . . *vlad*
24. Atrial area with parallel, transverse ridges (figs. 508, 543) 25
– Atrial area without such ridges (figs. 440, 441) . . . . *puyo*
25. Genitalic apodemes long, conspicuous (figs. 542, 543) . . . . *lefty*
– Genitalia apodemes short, not obvious (figs. 507, 508) . . . . *centro*

Paradysderina zamora**,** new species
Figures 407–419

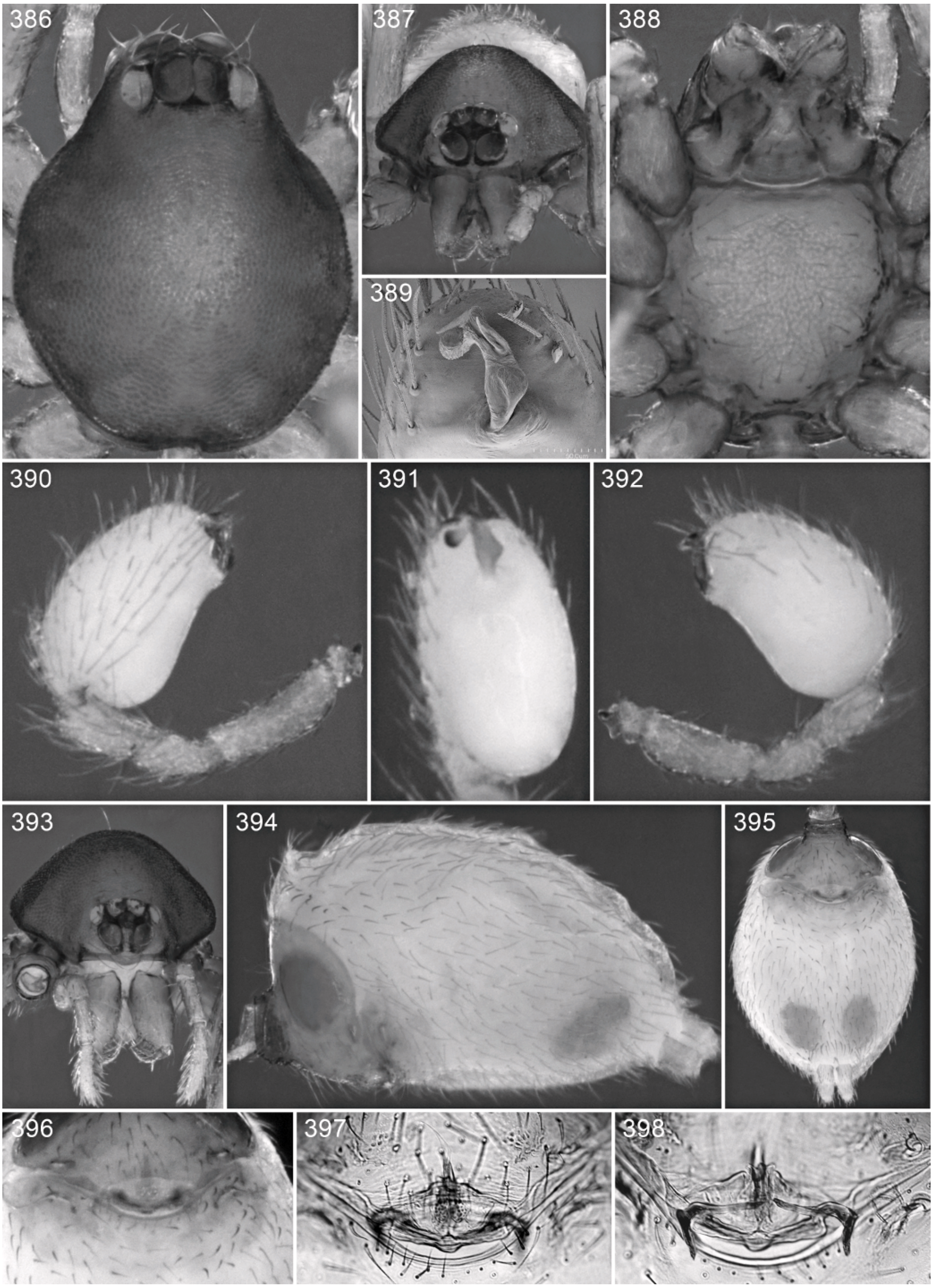
TYPES: Male holotype and female allotype from Los Tayos, Zamora-Chinchipe, Ecuador (July 8, 1976; T. de Vries), deposited in QCAZ (PBI_OON 10789).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

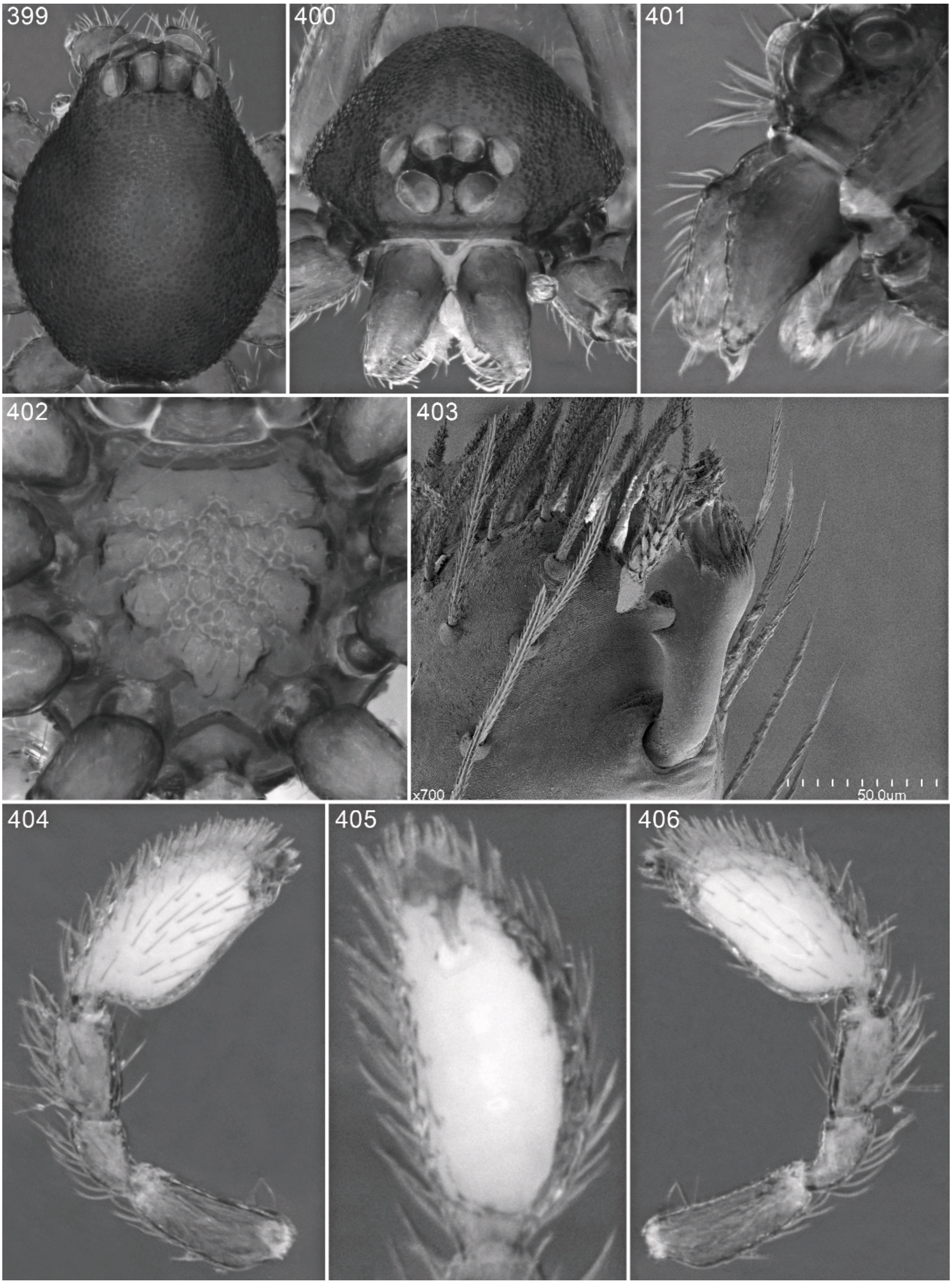
DIAGNOSIS: Males have the embolus abruptly bent, at a 45° angle, at about one-third its length (figs. 410–413), and deeply excavated chelicerae with dorsally directed spines (fig. 408); females have wide, thick apodemes (figs. 418, 419).

MALE (PBI_OON 10789, figs. 407–413): Total length 1.61. Elevated portion of pars cephalica granulate. Chilum short, rectangular. Anterior ledge of paturon with small but sharply pointed process; inner margin of paturon excavated, with wide, dorsally directed spine. Endites with ventral process wider, longer than dorsal process. Leg spination: legs I, II missing. Palps symmetrical; embolus abruptly bent at 45° angle at about one-third its length, tip beak shaped.

FEMALE (PBI_OON 10789, figs. 414–419): Total length 2.02. Chilum short, triangular. Postepigastric scutum only around epigastric furrow, not fused to epigastric scutum. Leg spination: femur I p0-0-2; tibiae: I v4-4-0,II v4-2-0; metatarsi I, II v2-2-0. Atrium wide, sides with heavily sclerotized structures visible through cuticle, those structures bifid at anterolateral corners.



Figs. 386–398. *Paradysderina pithecia*, new species, male (386–392) and female (393–398). **386.** Carapace, dorsal view. **387, 393.** Same, anterior view. **388.** Sternum and mouthparts, ventral view. **389.** Left embolus, ventral view. **390.** Left palp, prolateral view. **391.** Same, ventral view. **392.** Same, retrolateral view. **394.** Abdomen, lateral view. **395.** Same, ventral view. **396, 397.** Epigastric region, ventral view. **398.** Same, dorsal view.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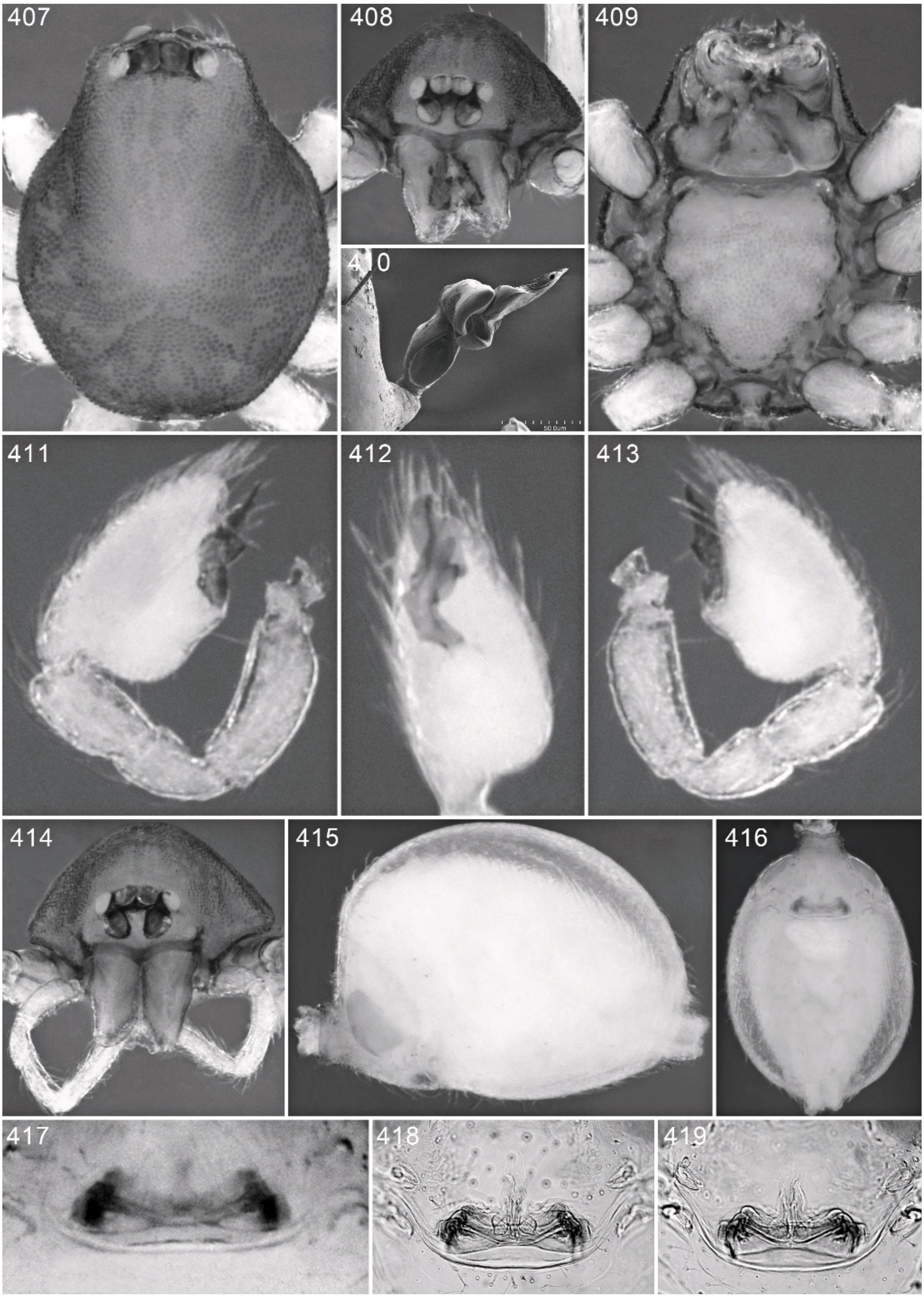
Figs. 399–406. *Paradysderina loreto,* new species, male. **399.** Carapace, dorsal view. **400.** Same, anterior view. **401.** Chelicerae and endites, lateral view. **402.** Sternum, ventral view. **403.** Left embolus, retrolateral view. **404.** Left palp, prolateral view. **405.** Same, ventral view. **406.** Same, retrolateral view.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Figs. 407–419. *Paradysderina zamora*, new species, male (407–413) and female (414–419). **407.** Carapace, dorsal view. **408, 414.** Same, anterior view. **409.** Sternum and mouthparts, ventral view. **410.** Left embolus, retrolateral view. **411.** Left palp, prolateral view. **412.** Same, ventral view. **413.** Same, retrolateral view. **415.** Abdomen, lateral view. **416.** Same, ventral view. **417, 418.** Epigastric region, ventral view. **419.** Same, dorsal view.

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Ecuador (Zamora-Chinchipe).

Paradysderina lostayos, new species

Figures 420–427

TYPE: Male holotype from Los Tayos, Zamora-Chinchipe, Ecuador (July 8, 1976; T. de Vries), deposited in QCAZ (PBI_OON 577).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males resemble those of the sympatric species *P. zamora* but have a shorter, ventrally expanded, distally widened embolus (figs. 424–427) and lack the cheliceral spines (fig. 421). This male is both too small and geographically too remote to be a likely match for any of the three species from Ecuador known only from females (*P. hermani*, *P. yasuni*, and *P. sucumbios*).

MALE (PBI_OON 577, figs. 420–427): Total length 1.58. Elevated portion of pars cephalica appears reticulate. Chilum long, narrow, triangular. Anterior ledge of paturon with long, rectangular, medially directed process abutting chilum. Endites with ventral process much wider than dorsal process. Leg spination: femur I p0-0-1; tibiae: I v4-4-0, II v4-2-0; metatarsi I, II v2-2-0. Palps symmetrical; embolus relatively short, wide, prolaterally excavated.

FEMALE: Unknown.

OTHER MATERIAL EXAMINED: One male (with missing abdomen) taken with the type (QCAZ).

DISTRIBUTION: Ecuador (Zamora-Chinchipe).

Paradysderina puyo, new species

Figures 428–441

TYPES: Male holotype and female allotype from tropical forest litter taken at an elevation of 800 m at Puyo, Pastaza, Ecuador (Apr. 1965; J., N. Leleup), deposited in KBIN (PBI_OON 16669).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males have both flanges of the embolus straight, elongated, and club shaped (figs. 432–435) and deeply excavated chelicerae (fig. 429); females resemble those of *P. zamora* but have a long anterior genitalic process (figs. 440, 441).

MALE (PBI_OON 16669, figs. 428–435): Total length 1.82. Elevated portion of pars cephalica granulate. Chilum short, wide, triangular. Anterior ledge of paturon with small tubercle situated near middle of anterior surface, inner margin deeply excavated, with dark, anteriorly directed spine. Endites with ventral process much wider, longer than dorsal process. Leg spination: femur I p0-0-2; tibiae: I v4-4-1p, II v4-4-0; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus elongated, originating at about half of bulb length, both flanges long, straight, parallel, basal portion of dorsal flange closely appressed to bulb surface.

FEMALE (PBI_OON 16669, figs. 436–441): Total length 1.54. Chilum tiny. Postepigastric scutum covering about one-third of abdomen length, fused to epigastric scutum. Leg spination: femora: I p0-0-2, II p0-0-1; tibiae I, II v4-4-1p; metatarsi: I, II v2-2-0. Narrow anterior genitalic process originating from wide base occupying most of atrial width.

OTHER MATERIAL EXAMINED: **Ecuador:** *Napo:* Archidona, Apr. 1965, tropical forest humus, elev. 750 m (J., N. Leleup, KBIN 16671), 2♀; Parque Nacional Napo-Galeras, 0°44′00″S, 77°28′07″W, Nov. 27, 2009, elev. 1005 m (Niarchos Exped., AMNH PBI_OON 590), 3♀; Sacha Wagra Lodge, Río Hollín, 0°57′18″S, 77°44′51″W, Nov. 29, 2009, elev. 655 m (Niarchos Exped., AMNH PBI_OON 591), 2♀. *Pastaza:* Puyo, Apr. 1965, tropical forest litter, elev. 800 m (J., N. Leleup, KBIN PBI_OON 16670), 2♀; 25 km N Puyo, July 13, 1976, Berlese, cloud forest litter, elev. 1000 m (S. Peck, FMNH PBI_OON 578), 1♀.

DISTRIBUTION: Ecuador (Pastaza, Napo).

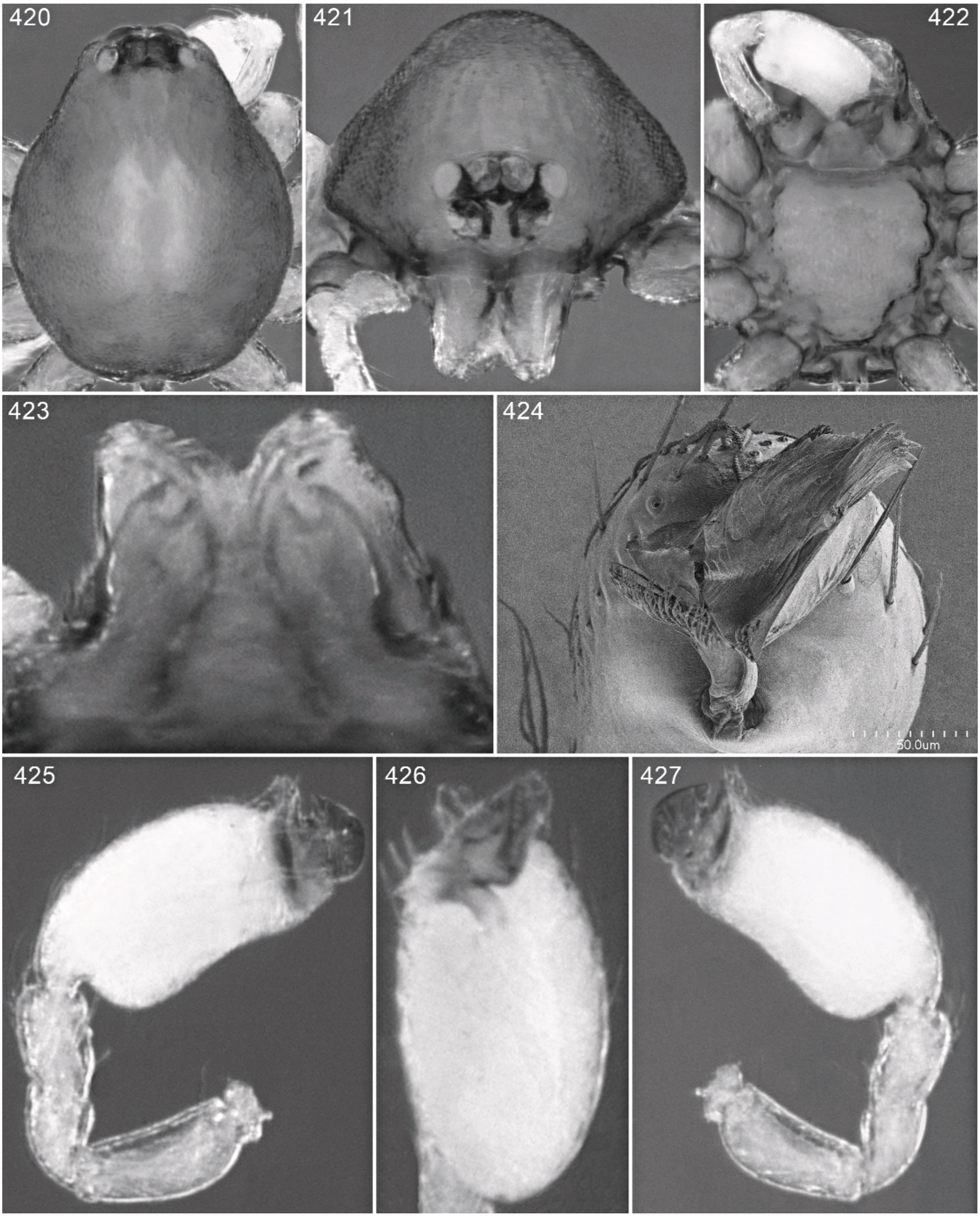
Paradysderina hermani, new species

Figures 442–449

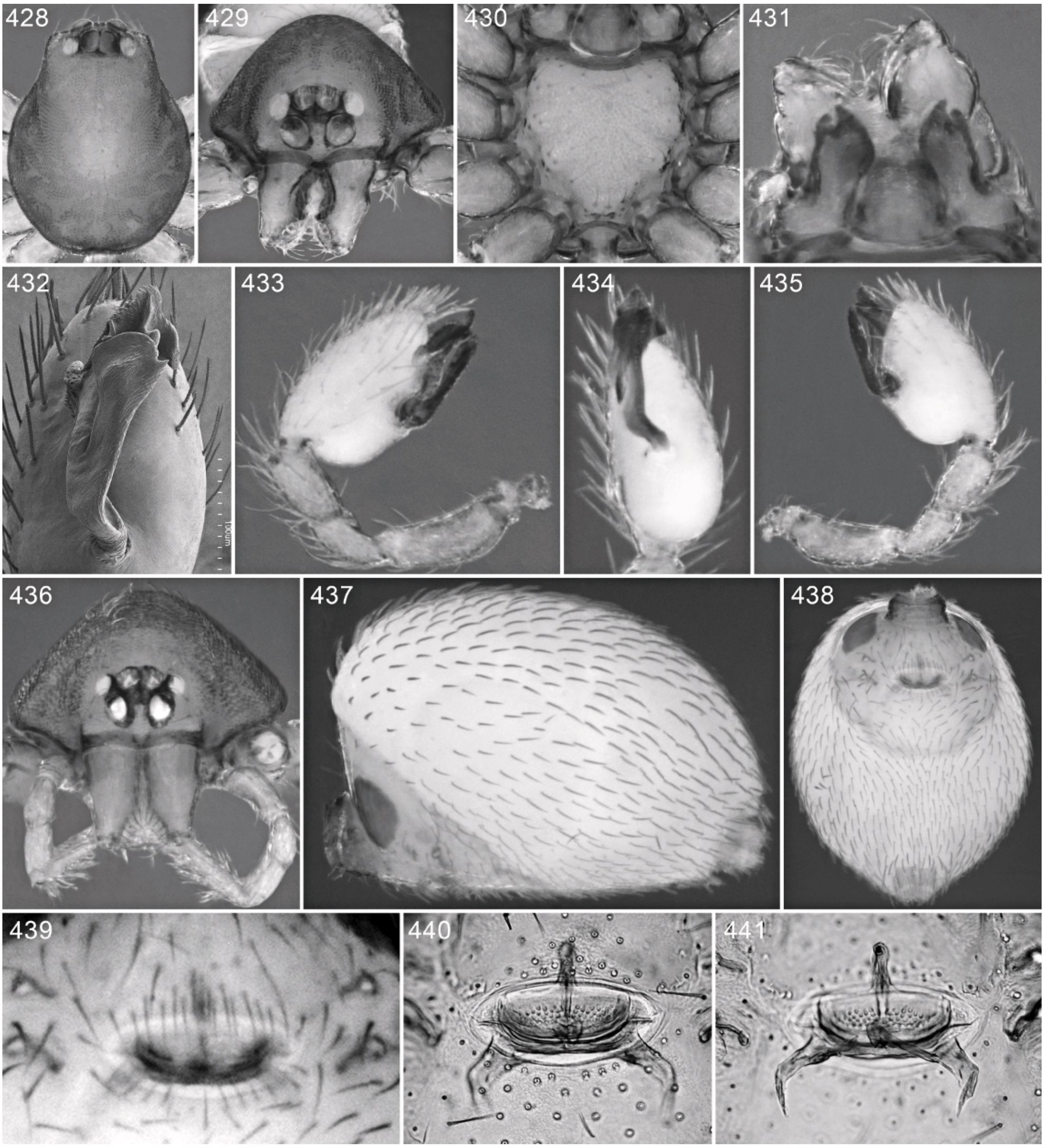
TYPE: Female holotype taken from litter at an elevation of 5300 ft at a site 81 km NE of Baeza and 3 km SW of Reventador, Napo, Ecuador (Oct. 28–29, 1988; L. Herman), deposited in AMNH (PBI_OON 662).

ETYMOLOGY: The specific name is a patronym in honor of the collector, coleopterist Lee Herman.

DIAGNOSIS: Females can easily be recognized by the odd conformation of the postepigastric scutum, which is wide at the



Figs. 420–427. *Paradysderina lostayos,* new species, male. **420.** Carapace, dorsal view. **421.** Same, anterior view. **422.** Sternum, ventral view. **423.** Mouthparts, ventral view. **424.** Left embolus, ventral view. **425.** Left palp, prolateral view. **426.** Same, ventral view. **427.** Same, retrolateral view.

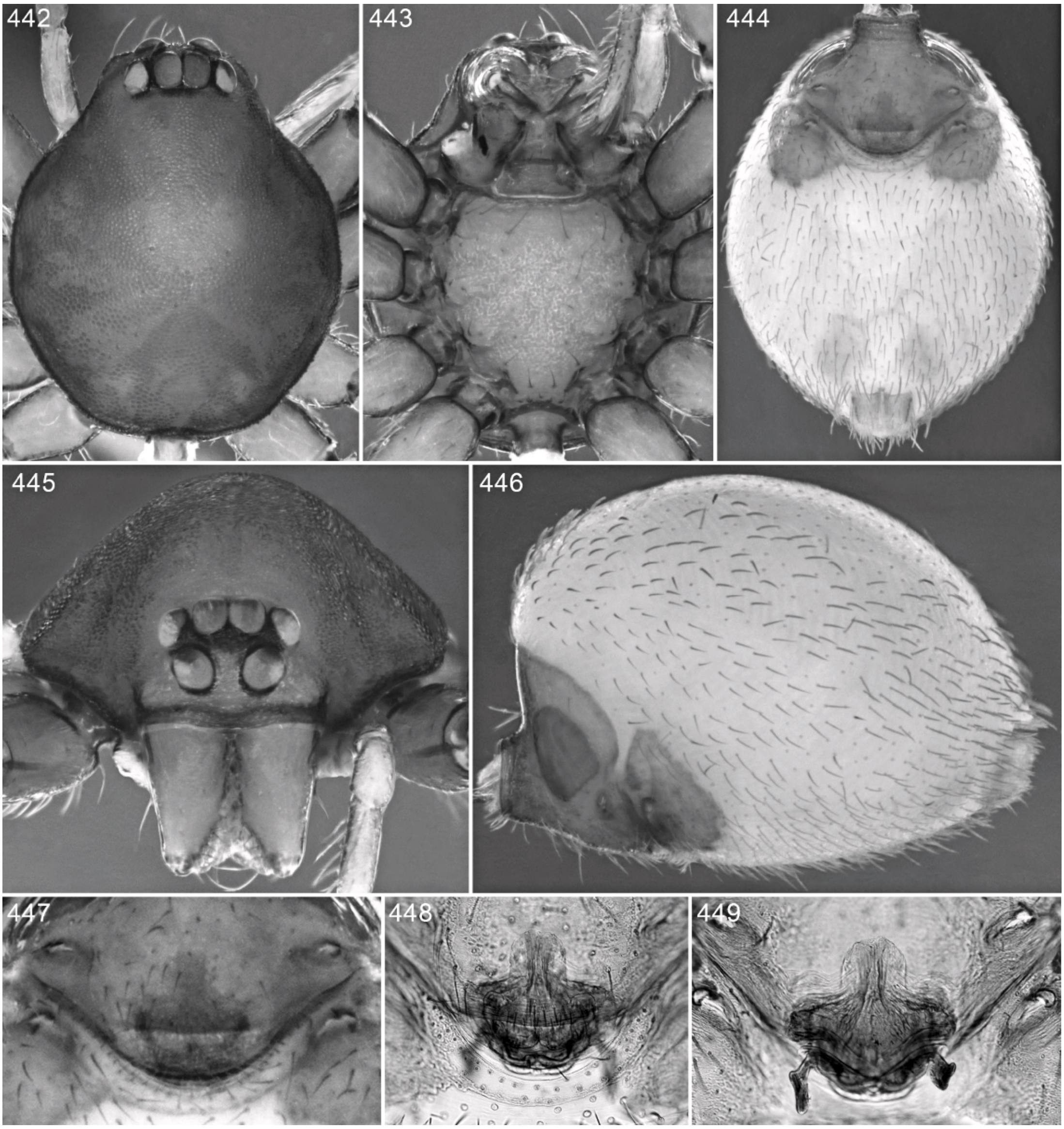


Figs. 428–441. *Paradysderina puyo,* new species, male (428–435) and female (436–441). **428.** Carapace, dorsal view. **429, 436.** Same, anterior view. **430.** Sternum, ventral view. **431.** Mouthparts, ventral view. **432.** Left embolus, ventral view. **433.** Left palp, prolateral view. **434.** Same, ventral view. **435.** Same, retrolateral view. **437.** Abdomen, lateral view. **438.** Same, ventral view. **439, 440.** Epigastric region, ventral view. **441.** Same, dorsal view.

sides but medially reduced to a narrow strip of cuticle (figs. 444, 447).

MALE: Unknown.

FEMALE (PBI_OON 662, figs. 442–449): Total length 2.67. Elevated portion of pars cephalica appears reticulate. Chilum small, rectangular. Postepigastric scutum only around epigastric furrow, not fused to epigastric scutum, laterally wide, but reduced medially to narrow strip of cuticle. Leg



Figs. 442–449. *Paradysderina hermani,* new species, female. **442.** Carapace, dorsal view. **443.** Sternum and mouthparts, ventral view. **444.** Abdomen, ventral view. **445.** Carapace, anterior view. **446.** Abdomen, lateral view. **447, 448.** Epigastric region, ventral view. **449.** Same, dorsal view.

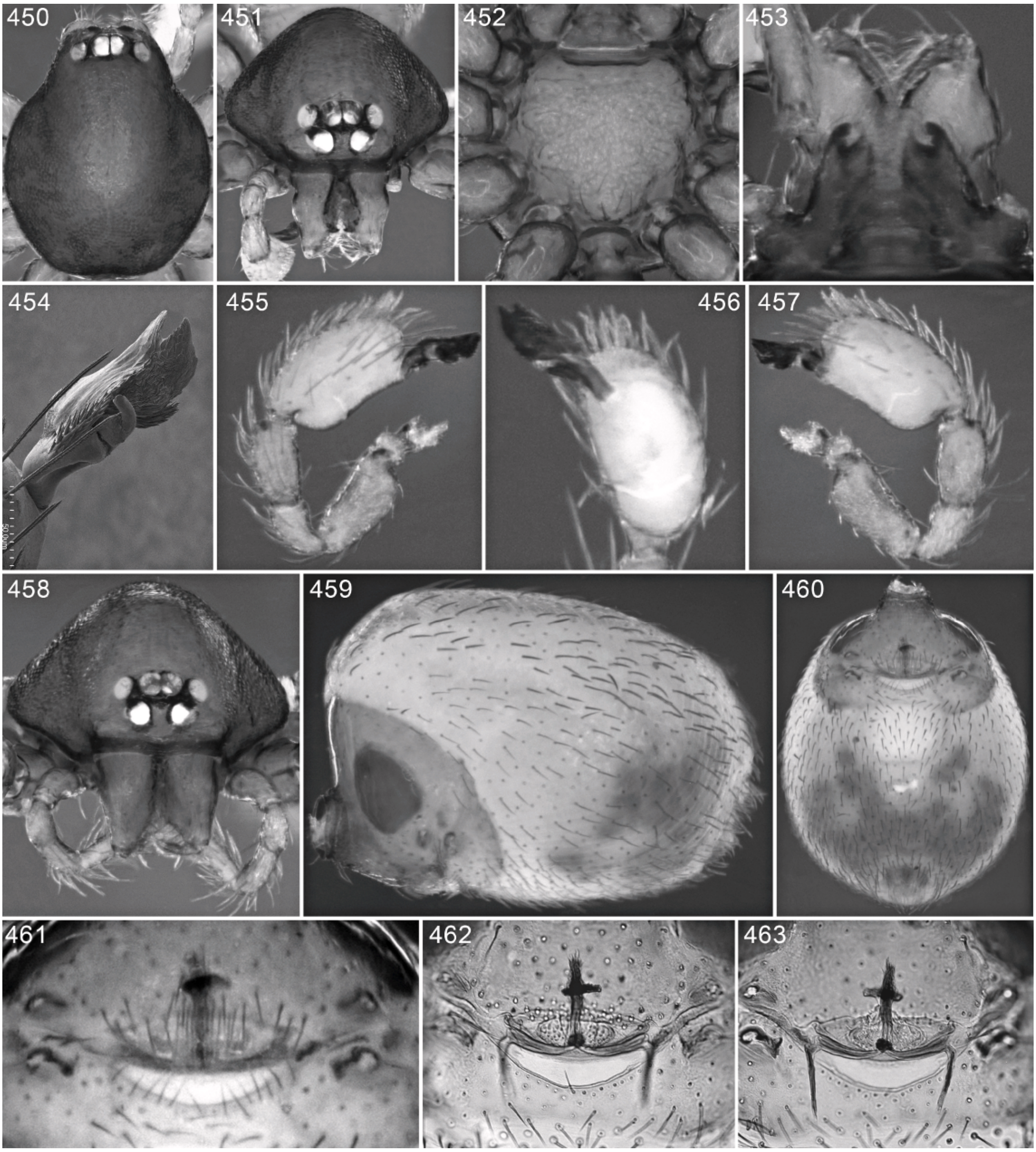
spination: femora: I p0-0-2, r0-2-1, II p0-0-1; r0-1-0; tibiae: I v4-4-2, II v4-4-1p; metatarsi: I v2-2-2, II v2-1p-2. Anterior genitalic process posteriorly wide, narrowed only anterior of anterior atrial ridge.

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Ecuador (Napo).

Paradysderina yanayacu, new species
Figures 450–463

TYPES: Male holotype and female allotype taken at an elevation of 2085 m on the Río Perdido trail at the Yanayacu Biological Station, 0°36.496′S, 77°52.947′W, Napo,



Figs. 450–463. *Paradysderina yanayacu,* new species, male (450–457) and female (458–463). **450.** Carapace, dorsal view. **451, 458.** Same, anterior view. **452.** Sternum, ventral view. **453.** Mouthparts, ventral view. **454.** Left embolus, prolateral view. **455.** Left palp, prolateral view. **456.** Same, ventral view. **457.** Same, retrolateral view. **459.** Abdomen, lateral view. **460.** Same, ventral view. **461, 462.** Epigastric region, ventral view. **463.** Same, dorsal view.

Ecuador (Nov. 26, 2009; Niarchos Exped.), deposited in QCAZ (PBI_OON 579).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males have a deeply invaginated embolar tip (figs. 454–457) and deeply excavated chelicerae (fig. 451); females have a cross-shaped anterior genitalic process (figs. 462, 463).

MALE (PBI_OON 579, figs. 450–457): Total length 1.60. Elevated portion of pars cephalica granulate. Chilum small, narrow, triangular. Paturon deeply excavated, anterior margin of excavated area with three medially directed tubercles, ventralmost one largest. Endites with ventral prong wider than dorsal prong, dorsal prong longer than ventral prong. Leg spination: femur I p0-0-1; tibiae: I v4-4-0, II v3-4-0; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus strongly elbowed, tip bifid.

FEMALE (PBI_OON 579, figs. 458–463): Total length 1.86. Postepigastric scutum only around epigastric furrow, fused to epigastric scutum, seam present between lateral edge of posterior spiracle and lateral margin of scutum. Leg spination: femora: I p0-0-2, II p0-0-1; tibiae: I v4-4-1p, II v3-4-1p; metatarsi I, II v2-2-1p. Long, narrow, distally expanded anterior genitalic process originating from short, wide, triangular base.

OTHER MATERIAL EXAMINED: **Ecuador:** *Napo:* Antisana Reserve road, 6.1 km SW Cosanga, 0°37′40″S, 77°50′38″W, Nov. 6, 1999, montane evergreen forest litter, elev. 2250 m (R. Anderson, AMNH PBI_OON 656), 1♂; Río Perdido trail, Yanayacu Biological Station, 0°36.496′S, 77°52.947′W, Nov. 26, 2009, elev. 2085 m (Niarchos Exped., AMNH PBI_OON 580), 1♀; Sacha Wagra Lodge, 10 km from Archidona, 0°57′18″S, 77°41′51.3″W, Nov. 29, 2009. Berlese, humid forest, karst formations, elev. 750 m (Niarchos Exped., MACN PBI_OON 30570), 1♂; San Jorge de Yanayacu, Yanayacu Biological Station, 0.58813°S, 77.88428°W, Nov. 26, 2009, elev. 2130 m (Niarchos Exped., AMNH PBI_OON 582), 6♀, same, P. Michalik vouchers EC-024, EC-044 (Niarchos Exped., AMNH PBI_OON 584, 43144), 2♂; trail to San Jorge de Yanayacu Wildlife Refuge, 0.58813°S, 77.88428°W, Nov. 25–30, 2009, dead leaves, Berlese, elev. 2140 m (Niarchos Exped., MACN PBI_OON 30562, 30582, 30607), 2♂, 8♀, same, Nov. 30, 2009, elev. 2140 m (Niarchos Exped., AMNH PBI_OON 581), 2♂, 8♀; Yanayacu Biological Station, stream trail, 0°35.955′S, 77°53.341′W, Nov. 24, 2009, elev. 2130 m (Niarchos Exped., AMNH PBI_OON 583), 4♀, same, Nov.24–25, 2009, pitfalls (Niarchos Exped., AMNH PBI_OON 30616), 2♂; Yanayacu Biological Station, stream trail, 0.60022°S, 77.89039°W, Nov. 25–30, 2009, dead leaves, elev. 2180 m (Niarchos Exped., MACN PBI_OON 30603, 30609, 30625), 1♂, 3♀, same, P. Michalik voucher EC 001, E. Gaublomme DNA voucher (Niarchos Exped., MACN PBI_OON 30842), 1♂; Yanayacu Biological Station, hill cloud forest with bamboo, 0°36.196′S, 77°53.407′W, Nov. 25, 2009, elev. 2200 m (B. Baehr, Niarchos Exped., AMNH PBI_OON 30635), 1♀.

DISTRIBUTION: Ecuador (Napo).

Paradysderina baehrae, new species
Figures 464–477

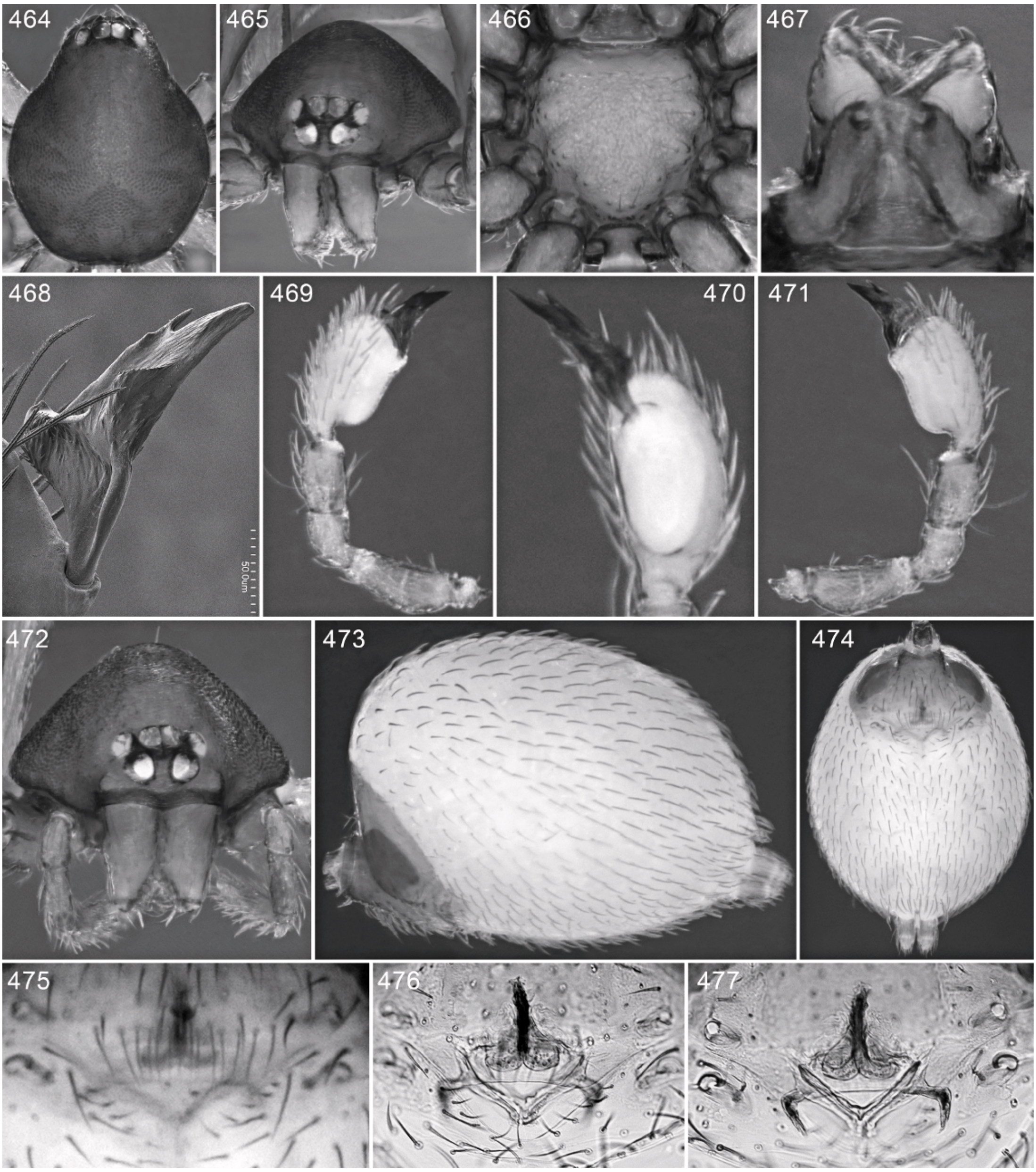
TYPES: Male holotype and female allotype taken by hand collecting at an elevation of 2400 m at the Yanayacu Biological Station, 0°36.496′S, 77°52.947′W, Napo, Ecuador (Nov. 28, 2009; B. Baehr, Niarchos Exped.), deposited in QCAZ (PBI_OON 585).

ETYMOLOGY: The specific name is a patronym in honor of Barbara Baehr, collector of the types.

DIAGNOSIS: Males have a distinctive embolus, with a small barb set back from the tip (figs. 468–471), and differ from those of the sympatric species *P. yanayacu* in lacking deep excavations on the chelicerae (fig. 465); females of both share a long anterior genitalic process, extending anterior of the anterior spiracles, but have a smaller subdistal widening on the anterior genitalic process (figs. 476, 477).

MALE (PBI_OON 585, figs. 464–471): Total length 1.80. Elevated portion of pars cephalica granulate. Chilum short, wide, triangular. Anterior ledge of paturon with heavily sclerotized, medially directed ridge bearing medially directed denticles. Endites with ventral process wide, with short tip, dorsal process narrow, with long, medially directed tip. Leg spination: femur I p0-0-2; tibiae: I v4-4-1p, II v4-3-0; metatarsi I, II v2-2-1p. Palps symmetrical; embolus with small barb set back from tip on dorsal edge.

FEMALE (PBI_OON 585, figs. 472–477): Total length 2.03. Postepigastric scutum only around epigastric furrow, fused to epigastric scutum. Leg spination: femora: I p0-0-2, II p0-0-1; tibiae: I v4-4-1p, II v4-4-0; metatarsi:



Figs. 464–477. *Paradysderina baehrae,* new species, male (464–471) and female (472–477). **464.** Carapace, dorsal view. **465, 472.** Same, anterior view. **466.** Sternum, ventral view. **467.** Mouthparts, ventral view. **468.** Left embolus, prolateral view. **469.** Left palp, prolateral view. **470.** Same, ventral view. **471.** Same, retrolateral view. **473.** Abdomen, lateral view. **474.** Same, ventral view. **475, 476.** Epigastric region, ventral view. **477.** Same, dorsal view.

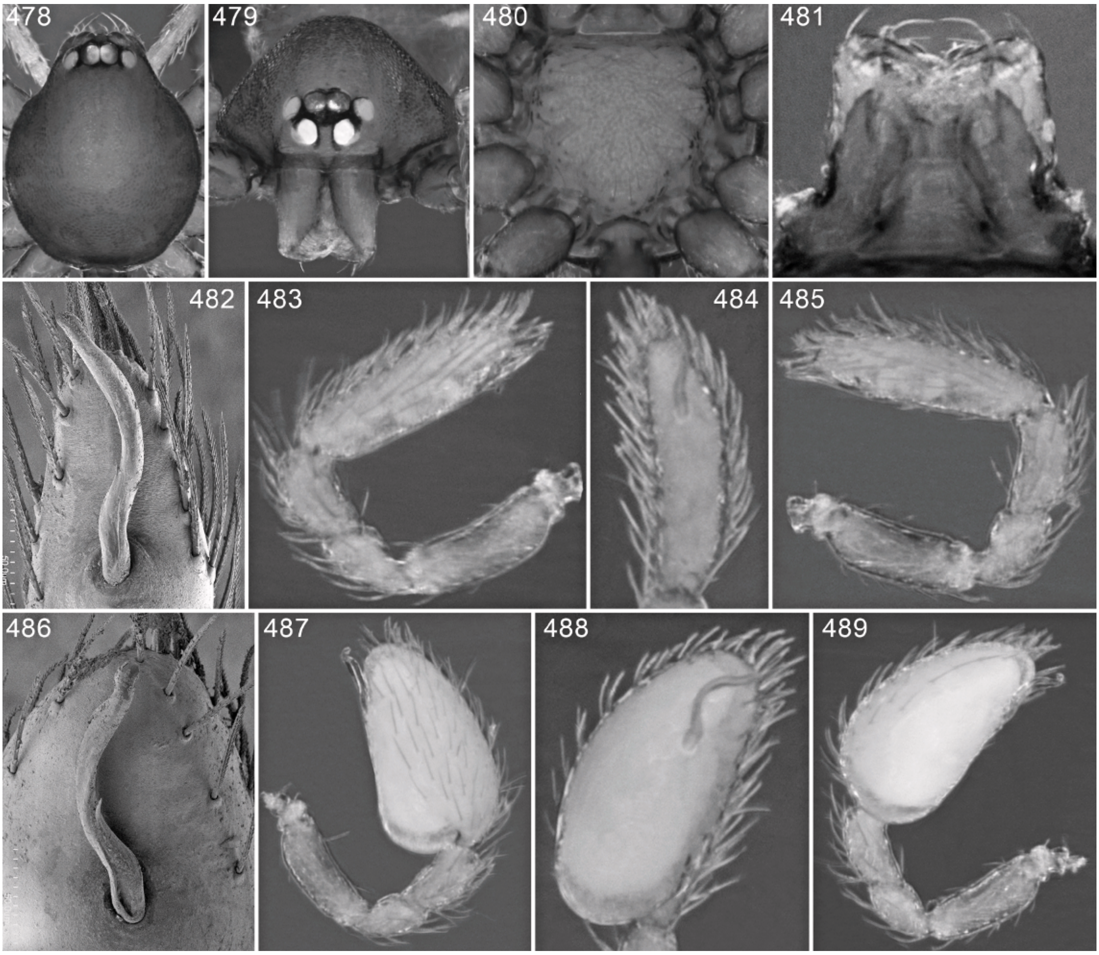
I v2-2-2, II v2-2-0. Anterior genitalic process with small, subdistal widening.

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Ecuador (Napo).

Paradysderina righty, new species
Figures 478–495

TYPES: Male holotype and female allotype taken by hand collecting at an elevation of



Figs. 478–489. *Paradysderina righty,* new species, male. **478.** Carapace, dorsal view. **479.** Same, anterior view. **480.** Sternum, ventral view. **481.** Mouthparts, ventral view. **482.** Left embolus, ventral view. **483.** Left palp, prolateral view. **484.** Same, ventral view. **485.** Same, retrolateral view. **486.** Right embolus, ventral view. **487.** Right palp, prolateral view. **488.** Same, ventral view. **489.** Same, retrolateral view.

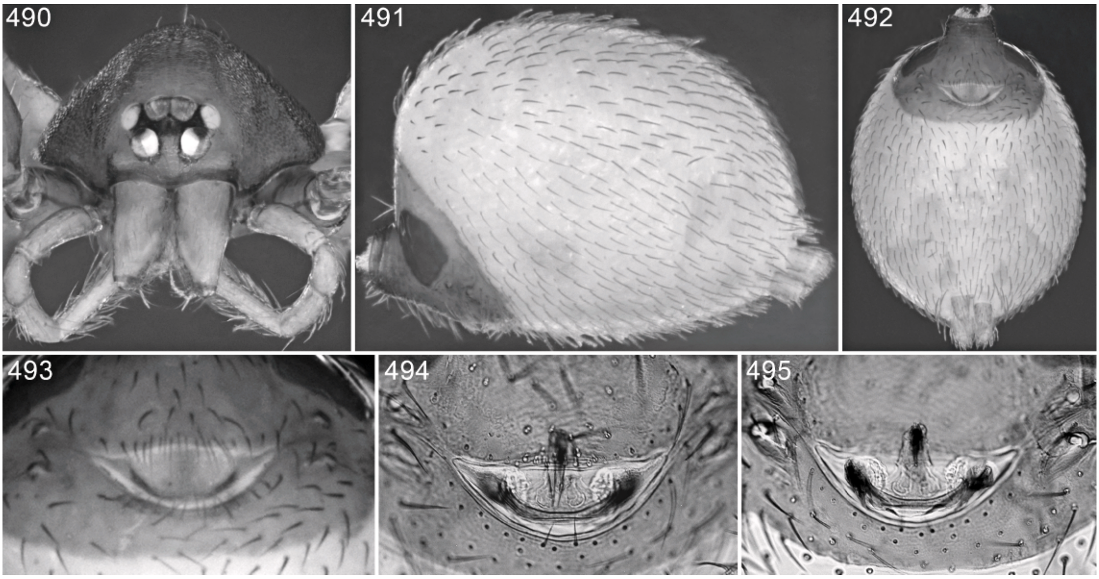
2400 m at the Yanayacu Biological Station, 0°36.496′S, 77°52.947′W (Nov. 28, 2009; B. Baehr, Niarchos Exped.), Napo, Ecuador deposited in QCAZ (PBI_OON 586).

ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: Males have highly asymmetric palps, with the left palp uninflated and shorter than the right palp; the emboli are similarly simple and distally twisted (figs. 482–489), and the chelicerae have a darkened protrusion near the fang furrow. Females have a sclerotized plate that almost fills the genital atrium (figs. 494, 495).

MALE (PBI_OON 586, figs. 478–489): Total length 1.89. Elevated portion of pars cephalica granulate. Chilum small, thumb shaped. Paturon with small, sharply pointed, heavily sclerotized, dorsally directed spine situated just dorsal of cheliceral tooth. Endites with ventral, dorsal processes both wide, sharply pointed. Leg spination: femur I p0-0-2; tibiae I, II v4-4-1p; metatarsi: I v2-2-1p, II v2-2-0. Left palpal bulb small, narrow; right bulb greatly inflated; embolus short, bent medially at about half its length.

FEMALE (PBI_OON 586, figs. 490–495): Total length 2.35. Postepigastric scutum only



Figs. 490–495. *Paradysderina righty,* new species, female. **490.** Carapace, anterior view. **491.** Abdomen, lateral view. **492.** Same, ventral view. **493, 494.** Epigastric region, ventral view. **495.** Same, dorsal view.

around epigastric furrow, fused to epigastric scutum. Leg spination: femora I, II p0-0-2; tibiae: I v4-4-2, II v4-4-1p; metatarsi: I v2-2-2, II v2-2-1p. Atrium semicircular, almost entirely filled with semicircular sclerotization.

OTHER MATERIAL EXAMINED: **Ecuador:** *Napo:* 4.8 km W El Chaco, 0°18′22″S, 77°50′38″W, Nov. 7, 1999, montane evergreen forest litter, elev. 1750 m (R. Anderson, AMNH PBI_OON 655), 2♂, 5♀; Parque Nacional Napo-Galeras, 0°44′00″S, 77°28′07″W, Nov. 27, 2009, elev. 1005 m (Niarchos Exped., AMNH PBI_OON 589), 1♀, same, 0°44′00″S, 77°35′28.7″W, elev. 1105 m, litter, Winkler, Berlese (Niarchos Exped., MACN PBI_OON 30629, 30632, 30633), 2♂, 1♀; Sacha Wagra Lodge, Río Hollín, 0°57′18″S, 77°44′51″W, Nov. 29, 2009, elev. 655 m (Niarchos Exped., AMNH PBI_OON 588), 1♂, 1♀; Sumaco, km 45 on Hollín-Loreto road, Dec. 19, 1989, pitfall (M. Wasbauer, H. Real, CAS 25871, PBI_OON 2381), 1♀; Yanayacu Biological Station, 0°36.496′S, 77°52.947′W, Nov. 28, 2009, hand collecting, elev. 2400 m (B. Baehr, E. Gaublomme DNA voucher, AMNH PBI_OON 587), 2♀.

DISTRIBUTION: Ecuador (Napo).

Paradysderina centro, new species

Figures 496–508.

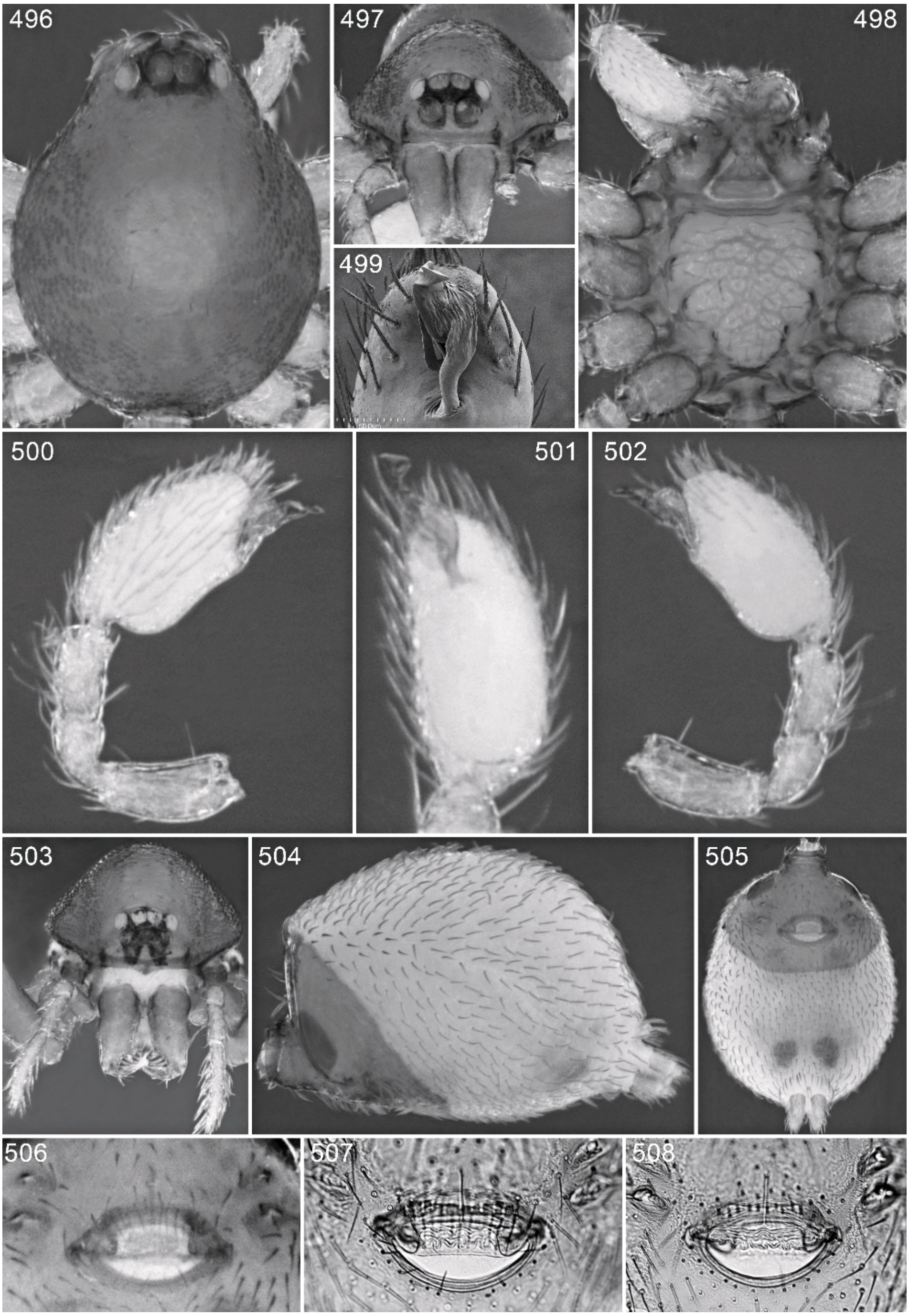
TYPES: Male holotype and female allotype taken at an elevation of 220 m at the Centro Cientifico Río Palenque, 0°54′S, 79°00′W, Los Ríos, Ecuador (Mar. 2, 1979; S. Sandoval), deposited in QCAZ (PBI_OON 10738).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males have a distinctive embolus that is very narrow at its base, then flared, and finally twisted (figs. 499–502); females have triangular, anterolateral sclerotizations in the genital atrium (figs. 507, 508).

MALE (PBI_OON 10785, figs. 496–502): Total length 1.32. Elevated portion of pars cephalica appears reticulate. Chilum tiny, triangular. Aside from anterior swelling, paturon unmodified. Endites with ventral process wide, dorsal process with long, narrow tip. Leg spination: femur I p0-0-1; tibiae: I v4-4-0, II v2-2-2; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus narrow at base, then flared, distally twisted.

FEMALE (PBI_OON 10785, figs. 503–508): Total length 1.66. Postepigastric scutum only around epigastric furrow, fused to



Figs. 496–508. *Paradysderina centro*, new species, male (496–502) and female (503–508). **496.** Carapace, dorsal view. **497, 503.** Same, anterior view. **498.** Sternum and mouthparts, ventral view. **499.** Left embolus, ventral view. **500.** Left palp, prolateral view. **501.** Same, ventral view. **502.** Same, retrolateral view. **504.** Abdomen, lateral view. **505.** Same, ventral view. **506, 507.** Epigastric region, ventral view. **508.** Same, dorsal view.

epigastric scutum. Leg spination: femur I p0-0-2; tibiae: I v4-4-1p, II v4-4-0; metatarsi: I v2-2-1p, II v2-2-0. Atrium with anterolateral, fingerlike sclerotizations; apodemes inconspicuous.

OTHER MATERIAL EXAMINED: **Ecuador:** *Los Ríos:* Centro Cientifico Río Palenque, 0°54′S, 79°00′W, May 18–30, 1975, Berlese, forest litter, elev. 700 ft (S., J. Peck, FMNH 33704, PBI_OON 10199, 10206, 31192), 41♂, 17♀, Feb. 21–24, 1976, Berlese, leaf litter with palm fruits, elev. 260 m (FMNH PBI_OON 31191), 2♂, 1♀, Feb. 25, 1976, Berlese, litter with decaying fruit, elev. 260 m (S. Peck, FMNH PBI_OON 10559), 1♂, Aug. 30, 1977, elev. 220 m (S. Sandoval, QCAZ PBI_OON 594), 1♀, Feb. 1, 1980 (KBIN PBI_OON 16637), 1♀, Dec. 21, 1980, closed palm forest (S. Sandoval, KBIN PBI_OON 16638), 3♀, Dec. 23, 1980, closed forest (S. Sandoval, QCAZ PBI_OON 10785), 2♂, 2♀, Dec. 26, 1980, secondary open forest (KBIN PBI_OON 16639), 2♂, Dec. 27, 1980, primary closed forest (S. Sandoval, QCAZ PBI_OON 10751), 1♂, Dec. 29, 1980, secondary closed forest (KBIN PBI_OON 16641), 1♂, 1♀, Dec. 30, 1980, closed cacao (S. Sandoval, QCAZ PBI_OON 593), 1♂, Jan. 1, 1981, secondary closed forest (S. Sandoval, KBIN PBI_OON 16644), 1♂, Jan. 2, 1981, closed cacao (S. Sandoval, KBIN PBI_OON 16643), 4♂, same, open cacao (KBIN PBI_OON 16642), 1♀, Jan. 4, 1981, primary closed forest (KBIN PBI_OON 16645), 2♀, Jan. 5, 1981, open cacao (S. Sandoval, KBIN PBI_OON 16646), 1♂, Jan. 8, 1981, closed cacao (S. Sandoval, KBIN PBI_OON 16647, 16648), 4♂, 3♀, Jan. 11, 1981, open palm (S. Sandoval, KBIN PBI_OON 16649, 16653), 2♂, 1♀, Jan. 12, 1981, primary closed forest (S. Sandoval, KBIN PBI_OON 16650), 2♂, 2♀, Feb. 1, 1981, secondary open forest (S. Sandoval, KBIN PBI_OON 16651), 1♂, Feb. 28, 1981, primary closed forest (KBIN PBI_OON 16652), 1♂, Feb. 21, 1983 (KBIN PBI_OON 16654), 1♀, Dec. 24, 1984, closed cacao (S. Sandoval, QCAZ PBI_OON 592), 4♂, 2♀, May 5–July 25, 1985, malaise-flight intercept trap, rainforest, elev. 250 m (S., J. Peck, AMNH PBI_OON 595), 2♂. *Pichincha:* ca. 25 air km WNW Quito, Dec. 25, 1980, cacao plantation (S. Sandoval, CAS 29532, PBI_OON 3674), 5♂.

DISTRIBUTION: Ecuador (Los Ríos, Pichincha).

Paradysderina fusiscuta, new species

Figures 509–528

TYPES: Male holotype and female allotype taken by hand collecting in litter in a cloud forest with palms at an elevation of 1495 m near Tandapi, 2 km from the main road to Quito, 0°23′17″S, 77°49′04″W, Pichincha, Ecuador (Dec. 7, 2009; N. Dupérré, E. Tapia, Niarchos Exped.), deposited in QCAZ (PBI_OON 596).

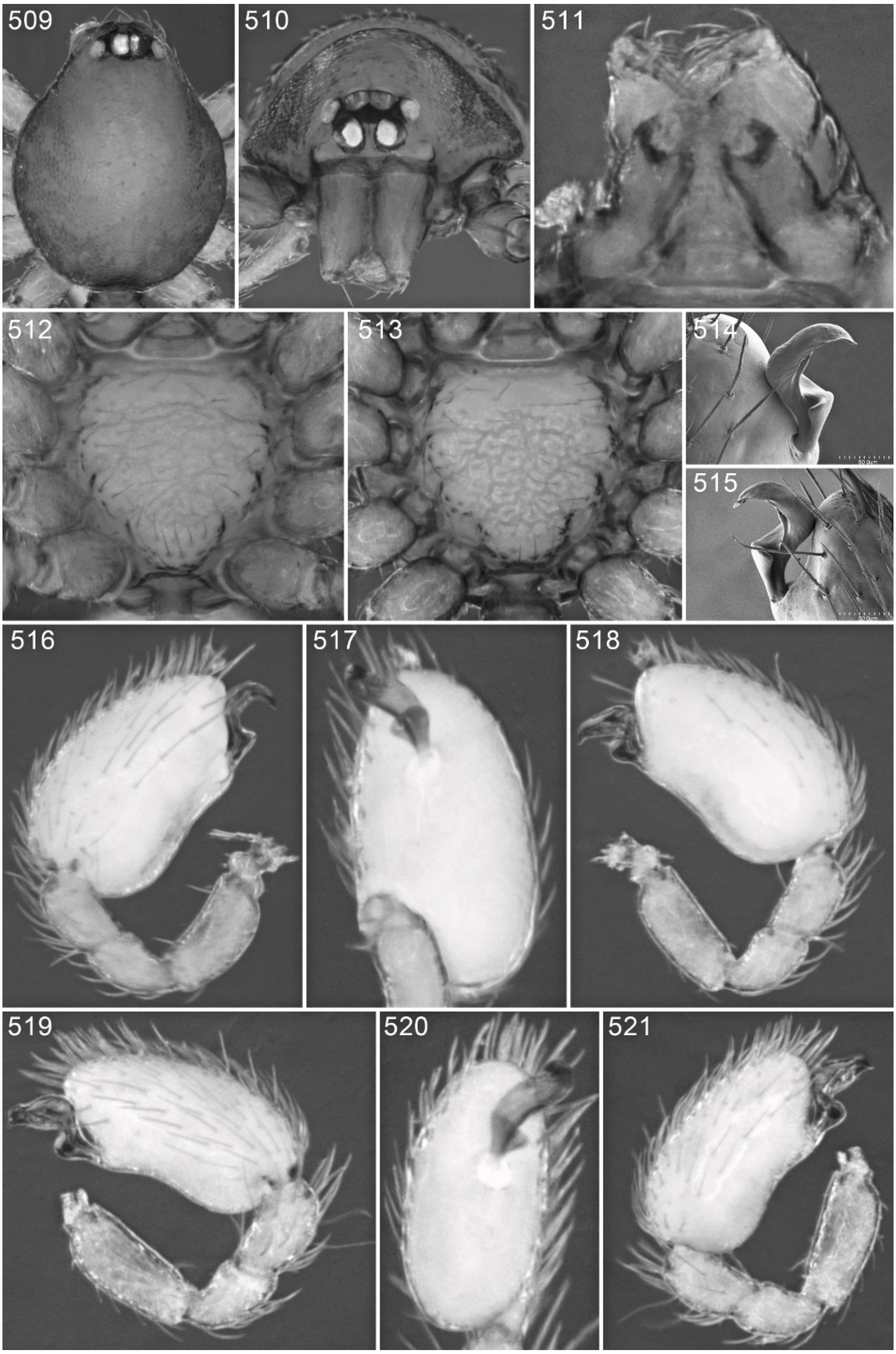
ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: Males have a sickle-shaped embolus (figs. 514, 515), and the right palp is less inflated than the left (figs. 516–521); females have what appears to be a remnant of the dorsal abdominal scutum, fused to the epigastric scutum (fig. 522).

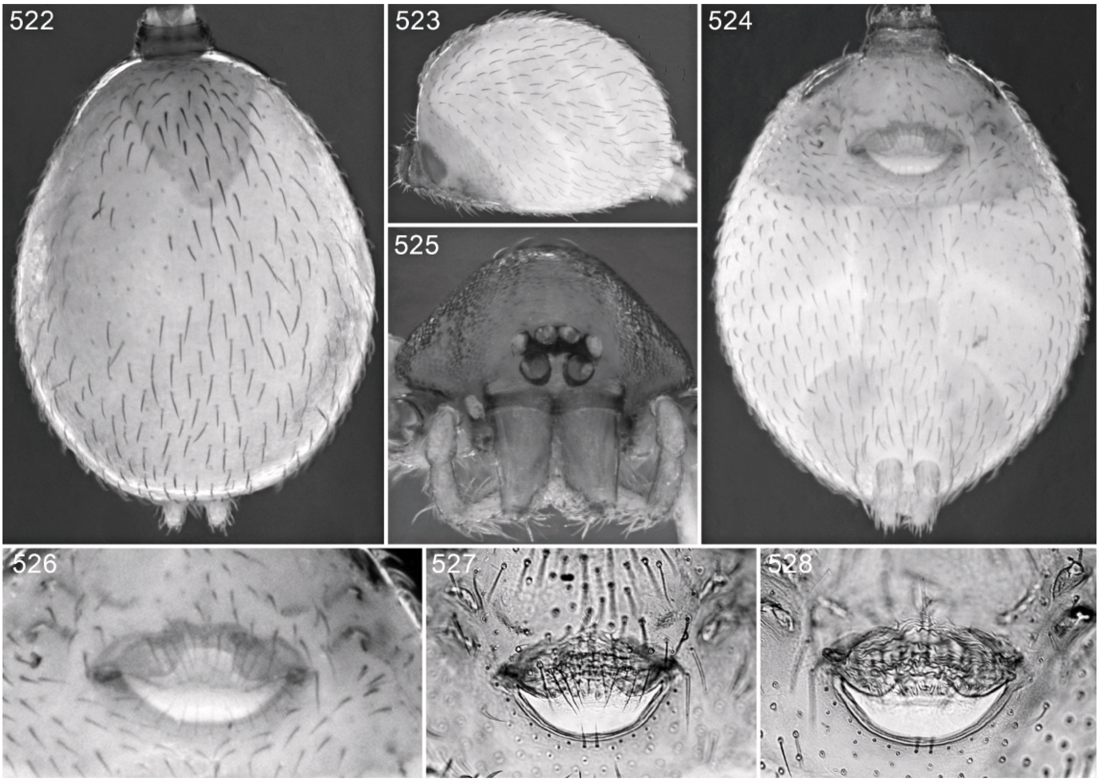
MALE (PBI_OON 596, figs. 509–521): Total length 1.54. Elevated portion of pars cephalica appears reticulate. Chilum tiny, triangular. Anterior ledge of paturon with slight knob on dorsomedian side. Endites with ventral process much shorter than dorsal process. Leg spination: femur I p0-0-1; tibiae: I v4-4-1p, II v4-2-0; metatarsi: I v2-2-1p, II v2-2-0. Right palp consistently different from left palp; embolus sickle shaped in prolateral view; right bulb less inflated than left.

FEMALE (PBI_OON 596, figs. 522–528): Total length 1.61. Postepigastric scutum only around epigastric furrow, fused to epigastric scutum. Leg spination: femora: I p0-0-2, II p0-0-1; tibiae: I v4-4-2, II v4-4-1p; metatarsi I, II v2-2-1p. Anterior ridge of atrium strongly recurved, producing pair of lateral corners; anterior half of atrium sclerotized.

OTHER MATERIAL EXAMINED: **Ecuador:** *Cotopaxi:* Otonga, 0°25′11″S, 78°59′41″W, Dec. 8, 2009, hand collecting, forest litter, elev. 1625 m (B. Baehr, Niarchos Exped., AMNH PBI_OON 598), 1♂, same, elev. 1705 m (N. Dupérré, E. Tapia, Niarchos Exped., AMNH PBI_OON 599), 1♂, 1♀, same, Berlese, (Niarchos Exped., MACN PBI_OON 30623), 2♂, same, litter (P. Michalik voucher EC-086, Niarchos Exped., AMNH PBI_OON 43143), 1♂. *Pichincha:*



Figs. 509–521. *Paradysderina fusiscuta,* new species, male. **509.** Carapace, dorsal view. **510.** Same, anterior view. **511.** Mouthparts, ventral view. **512.** Sternum, ventral view, specimen from Tandapi. **513.** Same, specimen from Otonga. **514.** Left embolus, prolateral view. **515.** Right embolus, prolateral view. **516.** Left palp, prolateral view. **517.** Same, ventral view. **518.** Same, retrolateral view. **519.** Right palp, prolateral view. **520.** Same, ventral view. **521.** Same, retrolateral view.



Figs. 522–528. *Paradysderina fusiscuta,* new species, female. **522.** Abdomen, dorsal view. **523.** Same, lateral view. **524.** Same, ventral view. **525.** Carapace, anterior view. **526, 527.** Epigastric region, ventral view. **528.** Same, dorsal view.

Bellavista Reserve, 12 km S Nanegalito, 0°00′32″S, 78°41′08″W, Oct. 30, 1999, cloud forest litter, elev. 2150 m (R. Anderson, AMNH PBI_OON 657), 2♂; Maquipucuna Reserve, 0°05′34″N, 78°37′37″W, Oct. 29, 1999, ridgetop montane forest litter, elev. 1620 m (R. Anderson, AMNH PBI_OON 658), 2♂, 1♀, same, mixed *Cecropia* cloud forest, elev. 1600 m (R. Anderson, AMNH PBI_OON 659), 1♂; Tandapi, 2 km from the main road to Quito, 0°23′17″S, 77°49′04″W, Dec. 7, 2009, Berlese, litter, cloud forest with palms, elev. 1495 m (N. Dupérré, E. Tapia, Niarchos Exped., Eva Gaublomme DNA voucher, AMNH PBI_OON 597), 2♀; 3 km E Tandapi, June 21, 1975, Berlese, wet ravine litter, elev. 4300 ft (S. Peck, FMNH 33716, 33728, PBI_OON 10218, 10231), 7♂, 1♀; 16 km E Tandapi, June 20, 1975, Berlese, dry litter, bamboo-moss forest, elev. 6600 ft (S. Peck, FMNH 33721, PBI_OON 10223), 8♂, 7♀, June 7, 1976, Berlese, moss, forest litter, elev. 2300 m (S. Peck, FMNH PBI_OON 10552, 10553), 2♂, 6♀.

DISTRIBUTION: Ecuador (Cotopaxi, Pichincha).

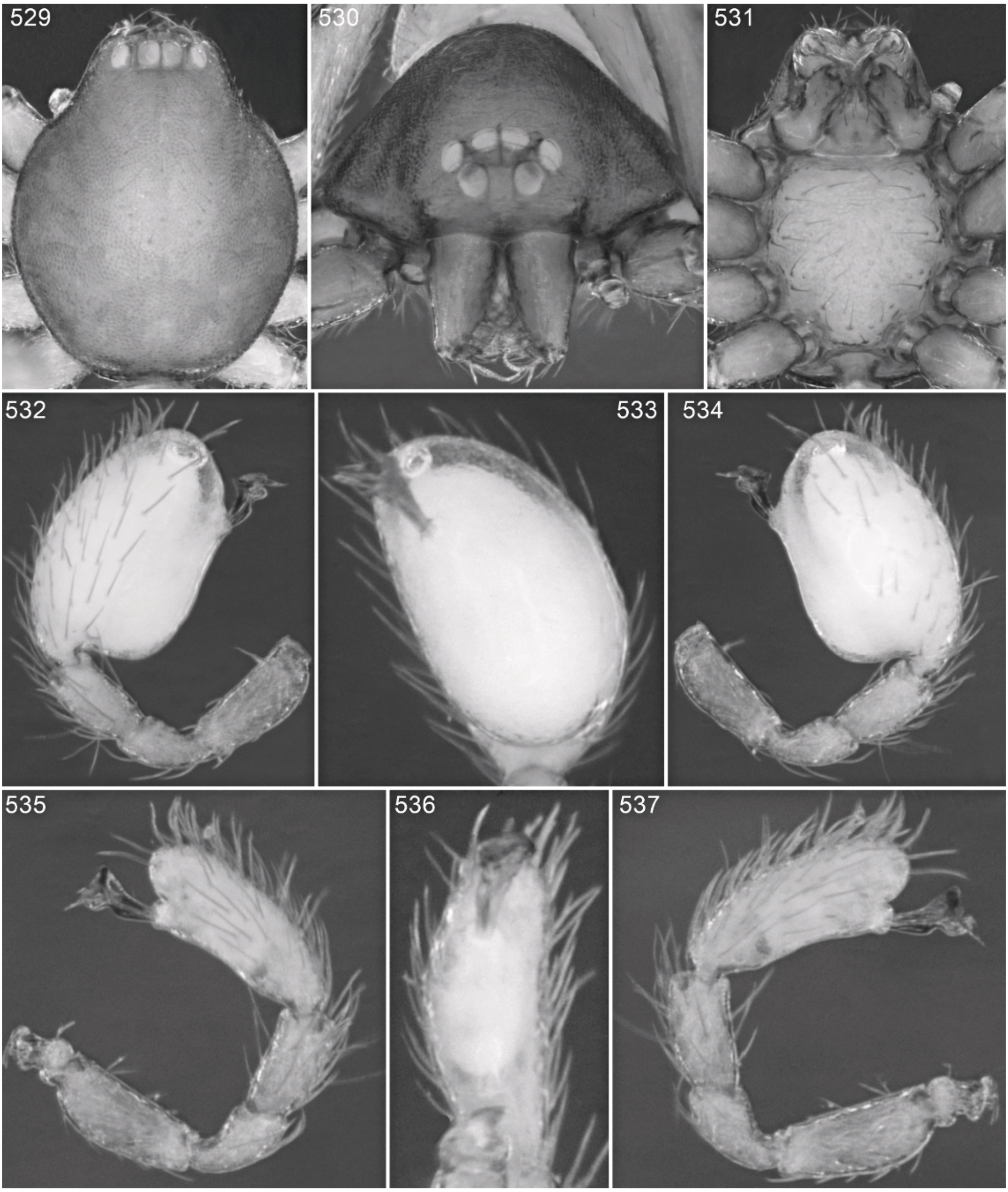
Paradysderina lefty, new species

Figures 529–543

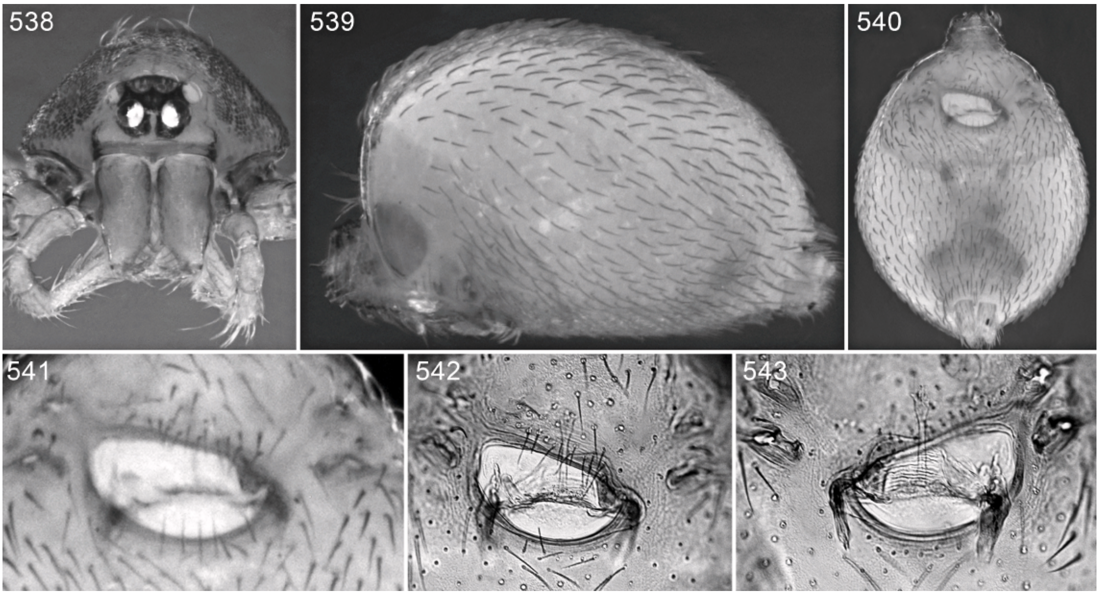
TYPE: Male holotype collected by hand from cloud forest litter taken at an elevation of 2150 m at a site 21 km north of Tandapi, on the main road from Tandapi to Quito, 0°27′20.3″S, 77°45′15.5″W, Pichincha, Ecuador (Dec. 7, 2009; N. Dupérré, E. Tapia, Niarchos Exped.), deposited in QCAZ (PBI_OON 600).

ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: Males can easily be recognized by their highly asymmetrical palps; the left palp is three times the size of the right one,



Figs. 529–537. *Paradysderina lefty,* new species, male. **529.** Carapace, dorsal view. **530.** Same, anterior view. **531.** Sternum and mouthparts, ventral view. **532.** Left palp, prolateral view. **533.** Same, ventral view. **534.** Same, retrolateral view. **535.** Right palp, prolateral view. **536.** Same, ventral view. **537.** Same, retrolateral view.



Figs. 538–543. *Paradysderina lefty,* new species, female. **538.** Carapace, anterior view. **539.** Abdomen, lateral view. **540.** Same, ventral view. **541, 542.** Epigastric region, ventral view. **543.** Same, dorsal view.

and there are differences in the shape of the embolar tip as well (figs. 532–537); the single female here tentatively matched with the male resembles those of *P. fusiscuta* but lacks any remnant of a dorsal abdominal scutum and has an asymmetrical genitalic atrium (figs. 542, 543) that is probably teratological but differs clearly in having conspicuous apodemes. The female differs from the male in that the elevated portion of the pars cephalica appears reticulate, rather than granulate, and may therefore be mismatched with the male.

MALE (PBI_OON 600, figs. 529–537): Total length 1.98. Elevated portion of pars cephalica granulate. Chilum tiny, triangular. Paturon with short, ventrally situated, dorsally directed, heavily sclerotized spine. Endites with ventral, dorsal processes short, widely separated at base. Leg spination: femur I p0-0-1; tibiae I, II v4-4-0; metatarsi: I v2-2-1p, II v2-2-0. Left bulb more than three times size of right bulb; embolus with three distal projections.

FEMALE (PBI_OON 30605, figs. 538–543): Total length 1.61. Elevated portion of pars cephalica appears reticulate. Postepigastric scutum only around epigastric furrow, fused to epigastric scutum. Leg spination: femora: I p0-0-2, II p0-0-1; tibiae I, II v4-4-1p; metatarsi I, II v2-2-1p. Atrium asymmetrical, possibly teratological; apodemes conspicuous.

OTHER MATERIAL EXAMINED: **Ecuador:** *Pichincha:* Hosteria Shishink, 5.5 km from Puerto Rico, 0.05609°N, 79.20596°W, Dec. 8, 2009, dead leaves, elev. 375 m (M. Ramírez, Niarchos Exped., MACN PBI_OON 30605), 1♀.

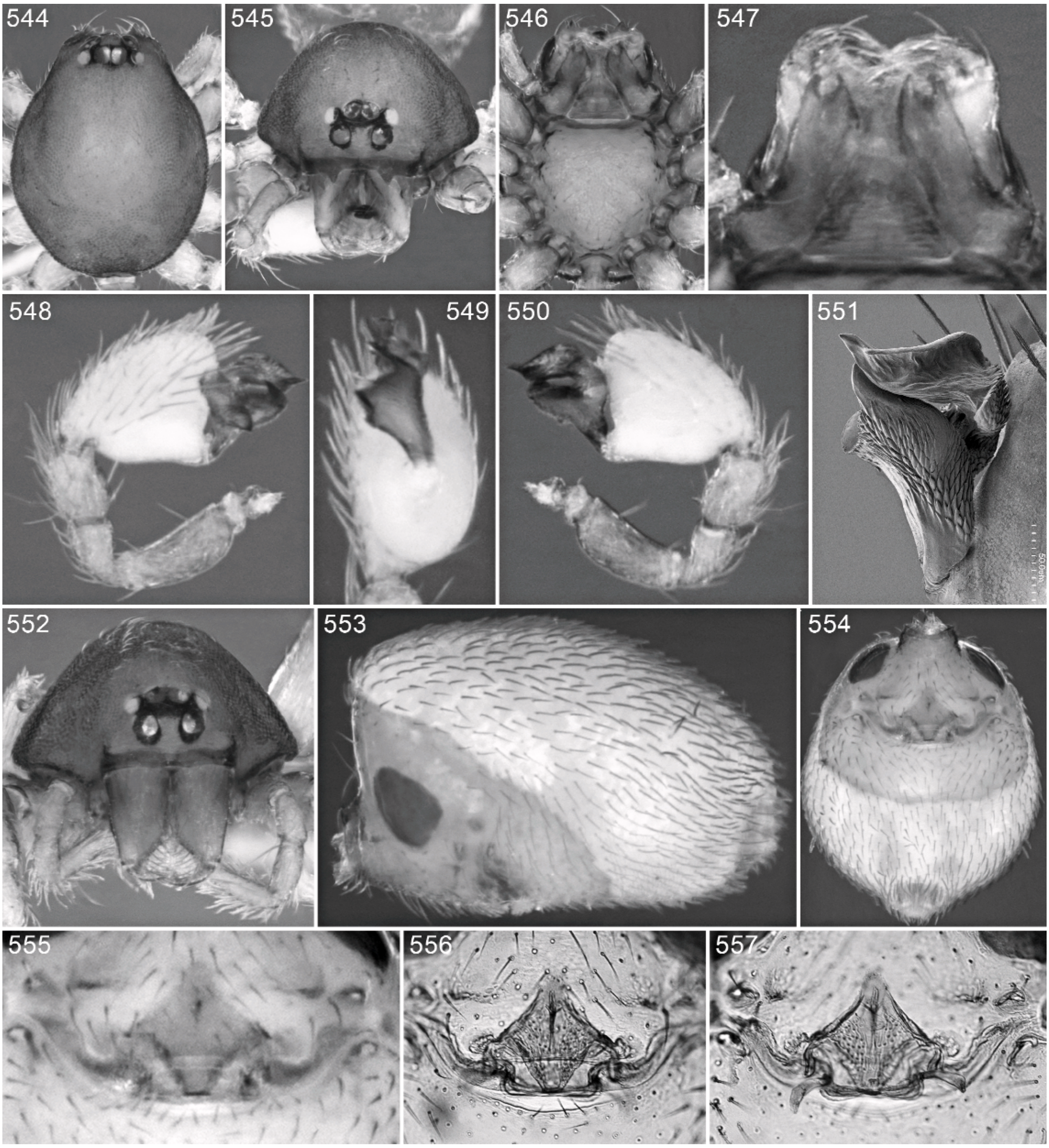
DISTRIBUTION: Ecuador (Pichincha).

Paradysderina vlad, new species
Figures 544–557

TYPE: Male holotype from humid forest litter taken at an elevation of 295 m at the Estación Científica Yasuni, 0.067428°S, 76.39764°W, Orellana, Ecuador (Dec. 1–5, 2009; M. Ramírez, Niarchos Exped.), deposited in QCAZ (PBI_OON 30563).

ETYMOLOGY: The specific name is a noun in apposition taken from Vlad the Impaler, referring to the paired extensions on the clypeus.

DIAGNOSIS: Male can easily be recognized by the paired extensions on the clypeus (figs. 544, 545), the strongly excavated and spined chelicerae (fig. 545), and the massive embolus (figs. 548–551); females have a distinctively long genitalic atrium and large, triangular anterior receptaculum (figs. 556,



Figs. 544–557. *Paradysderina vlad*, new species, male (544–551) and female (552–557). **544.** Carapace, dorsal view. **545, 552.** Same, anterior view. **546.** Sternum, ventral view. **547.** Mouthparts, ventral view. **548.** Left palp, prolateral view. **549.** Same, ventral view. **550.** Same, retrolateral view. **551.** Left embolus, retrolateral view. **553.** Abdomen, lateral view. **554.** Same, ventral view. **555, 556.** Epigastric region, ventral view. **557.** Same, dorsal view.

557). The posterior femora are basally lightened in color.

MALE (PBI_OON 30589, figs. 544–551): Total length 1.41. Elevated portion of pars cephalica granulate. Chilum triangular, fused to clypeus, which has pair of triangular projections, each situated at about half of paturon width. Inner surface of paturon strongly excavated, bearing large, medially directed, heavily sclerotized spine. Endites with ventral process wide, long; dorsal process narrow, long. Leg spination: femur

I p0-0-1; tibiae I, II v4-3-0; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus with both flanges massive, intricately bent.

FEMALE (PBI_OON 30589, figs. 552–557): Total length 1.47. Postepigastric scutum covering about one-third of abdomen length, fused to epigastric scutum. Leg spination: femur I p0-0-2; tibiae I, II v4-4-1p; metatarsi: I v2-2-1p, II v2-2-0. Anterior genitalic elements wide, triangular.

OTHER MATERIAL EXAMINED: **Ecuador:** *Orellana:* Estación Cientifica Yasuni, 0.067428°S, 76.39764°W, Dec. 1, 2009, leaf litter, elev. 200 m (Niarchos Exped., AMNH PBI_OON 601), 1♂, 0.067111°S, 76.4002°W, Dec. 2, 2009, leaf litter, canopy tower (Niarchos Exped., AMNH PBI_OON 604, 605), 5♀, Dec. 1–5, 2009, Berlese, humid forest litter, elev. 295 m (M. Ramírez, Niarchos Exped., MACN PBI_OON 30553, 30584, 30589), 3♂, 4♀, same, humid forest litter, Eva Gaublomme DNA vouchers (MACN PBI_OON 15092, 15103), 6♂, 1♀, 0°40′16′S, 76°24′, 18′W, Dec. 1–5, 2009, litter, pitfall, elev. 230 m (B. Baehr, Niarchos Exped., AMNH PBI_OON 602, 603), 2♀.

DISTRIBUTION: Lowland Amazonian Ecuador (Orellana).

Paradysderina yasuni, new species
Figures 558–565

TYPE: Female holotype taken from leaf litter at an elevation of 200 m at the Estación Científica Yasuni, 0.067111°S, 76.4002°W, Orellana, Ecuador (Dec. 1, 2009; Niarchos Exped.), deposited in QCAZ (PBI_OON 606).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Females can be recognized by the medially extremely narrow anterior genitalic process (figs. 564, 565), combined with anterolateral corners of the postepigastric scutum are not fused to the epigastric scutum (figs. 560, 562).

MALE: Unknown.

FEMALE (PBI_OON 606, figs. 558–565): Total length 2.11. Elevated portion of pars cephalica granulate. Chilum small, triangular. Postepigastric scutum only around epigastric furrow, not fused to epigastric scutum. Leg spination: femora I, II p0-0-2, r0-0-2; tibiae I, II v4-4-2; metatarsi: I v2-2-2, II v2-2-1p. Anterior genitalic process originating from W-shaped base.

OTHER MATERIAL EXAMINED: **Ecuador:** *Orellana:* Parque Nacional Yasuni, 0°40′16″S, 76°24′18″W, Dec. 1–5, 2009, litter, elev. 230 m (B. Baehr, Niarchos Exped., AMNH PBI_OON 607), 1♀; 1 km S Onkone Gare Camp, 0°39′25.77″S, 76°27′10.8″W, Reserva Etnica Waorani, Feb. 4, 1996, elev. 216 m (T. Erwin et al. USNM PBI_OON 37080), 1♀.

DISTRIBUTION: Lowland Amazonian Ecuador (Orellana).

Paradysderina dracula, new species
Figures 566–579

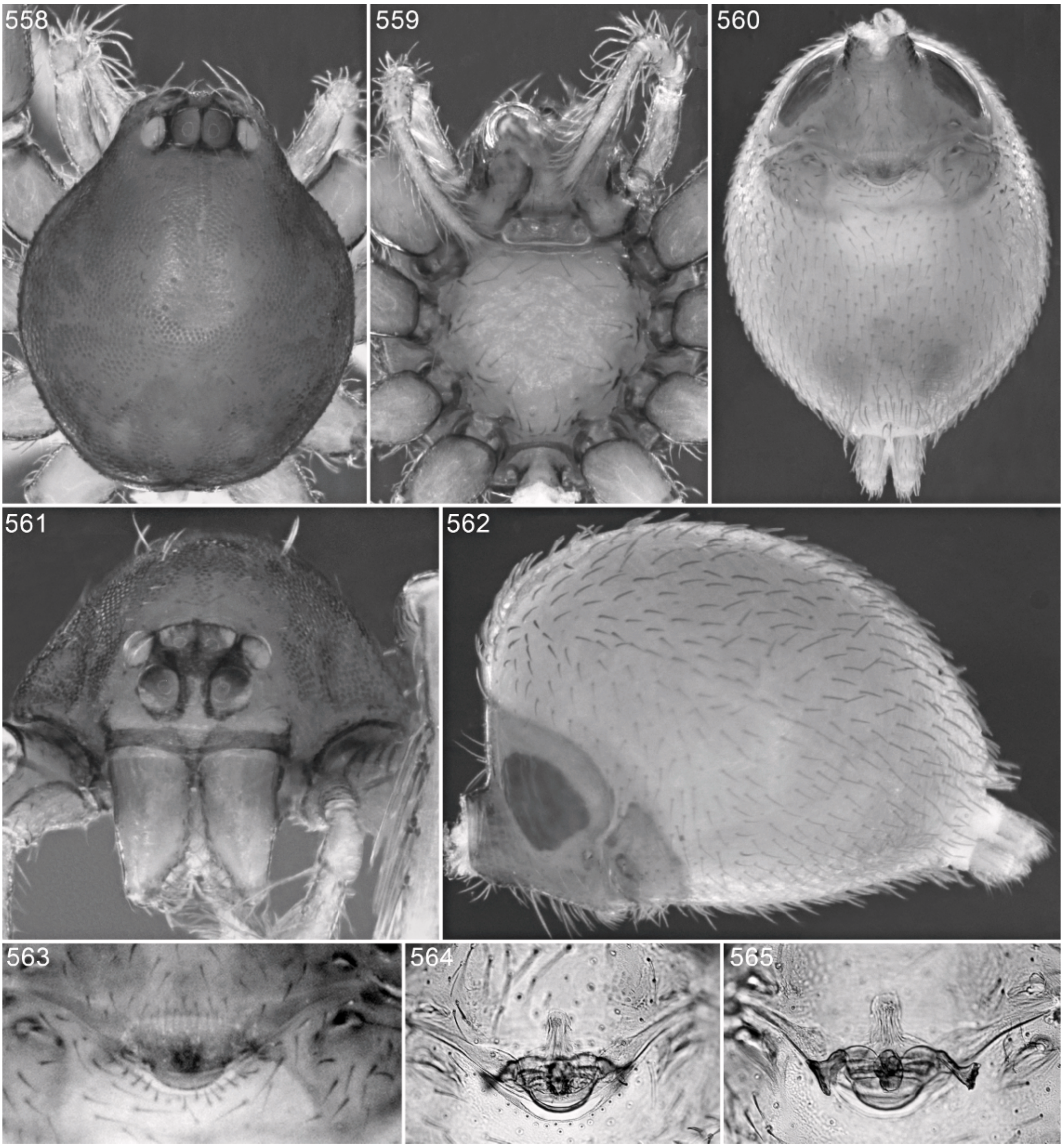
TYPE: Male holotype taken at an elevation of 216 m at a site 1 km south of Onkone Gare Camp, 0°39′25.77″S, 76°27′10.8″W, Reserva Etnica Waorani, Orellana, Ecuador (Feb. 5, 1995; T. Erwin et al.), deposited in USNM (PBI_OON 608).

ETYMOLOGY: The specific name is a noun in apposition, referring to the extraordinary cheliceral modifications of males.

DIAGNOSIS: Males can easily be recognized by the long, fanglike anterior projections on the chelicerae (figs. 566, 567); females have a heavily sclerotized base of the anterior genitalic process (figs. 578, 579); both sexes have the distal half of the leg femora, and the proximal half of the leg tibiae, darkened (fig. 573).

MALE (PBI_OON 608, figs. 566–572): Total length 1.92. Elevated portion of pars cephalica granulate. Chilum small, triangular. Dorsal half of paturon anteriorly excavated, excavation terminating in large, anteriorly directed process, process abruptly bent at about half its length, tip directed medially; space between chilum and paturon occupied by small, median, heavily sclerotized spine. Endites with ventral process tiny, almost obsolete, dorsal process hook shaped. Leg spination: femur I p0-0-1, r0-1-1; tibiae: I v4-4-1p, II v4-3-0; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus wide, massive, highly three-dimensional.

FEMALE (PBI_OON 609, figs. 573–579): Total length 2.02. Postepigastric scutum only around epigastric furrow, not fused to epigastric scutum. Leg spination: femora: I p0-0-2, r0-1-1; tibiae: I v4-4-1p, II v4-4-2;



Figs. 558–565. *Paradysderina yasuni,* new species, female. **558.** Carapace, dorsal view. **559.** Sternum and mouthparts, ventral view. **560.** Abdomen, ventral view. **561.** Carapace, anterior view. **562.** Abdomen, lateral view. **563, 564.** Epigastric region, ventral view. **565.** Same, dorsal view.

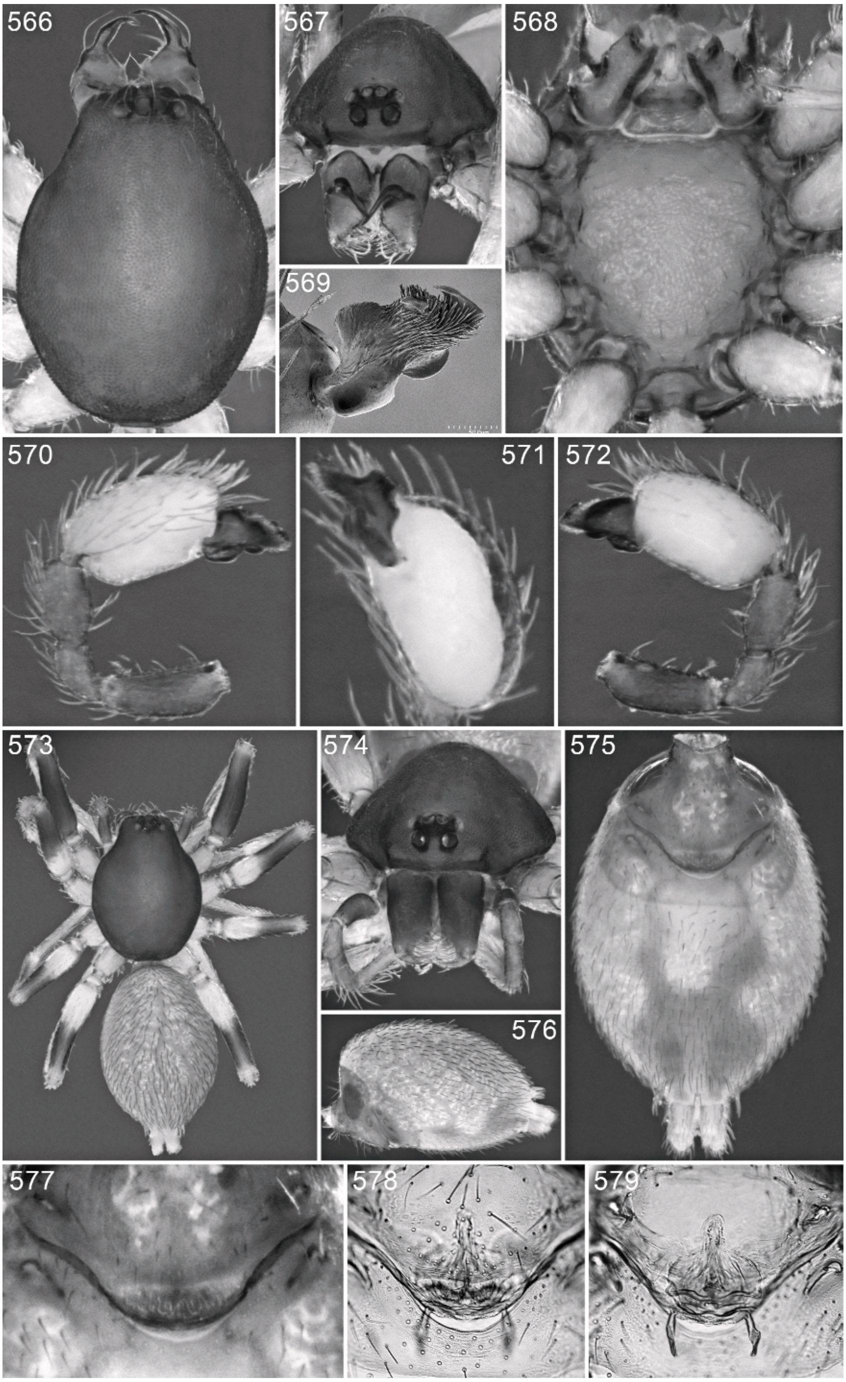
metatarsi I, II v2-2-1p. Atrium semicircular, most of atrial area occupied by wide base of anterior process.

OTHER MATERIAL EXAMINED: **Ecuador:** *Orellana:* Estación Cientifica Yasuni, 0.067111°S, 76.4002°W, Dec. 1, 2009, leaf litter, elev. 200 m (Niarchos Exped., AMNH PBI_OON 609), 1♀.

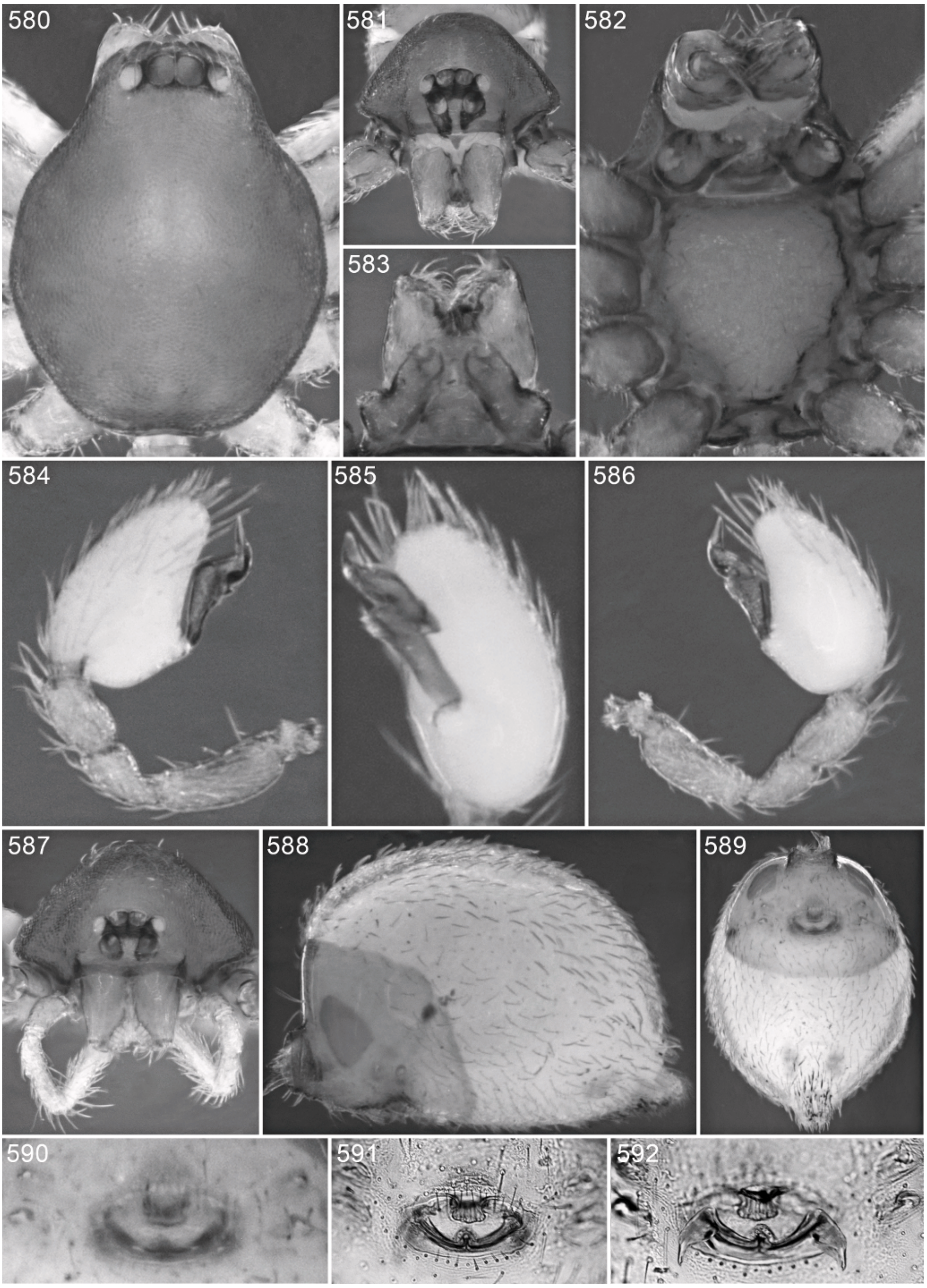
DISTRIBUTION: Lowland Amazonian Ecuador (Orellana).

Paradysderina pecki, new species
Figures 580–592

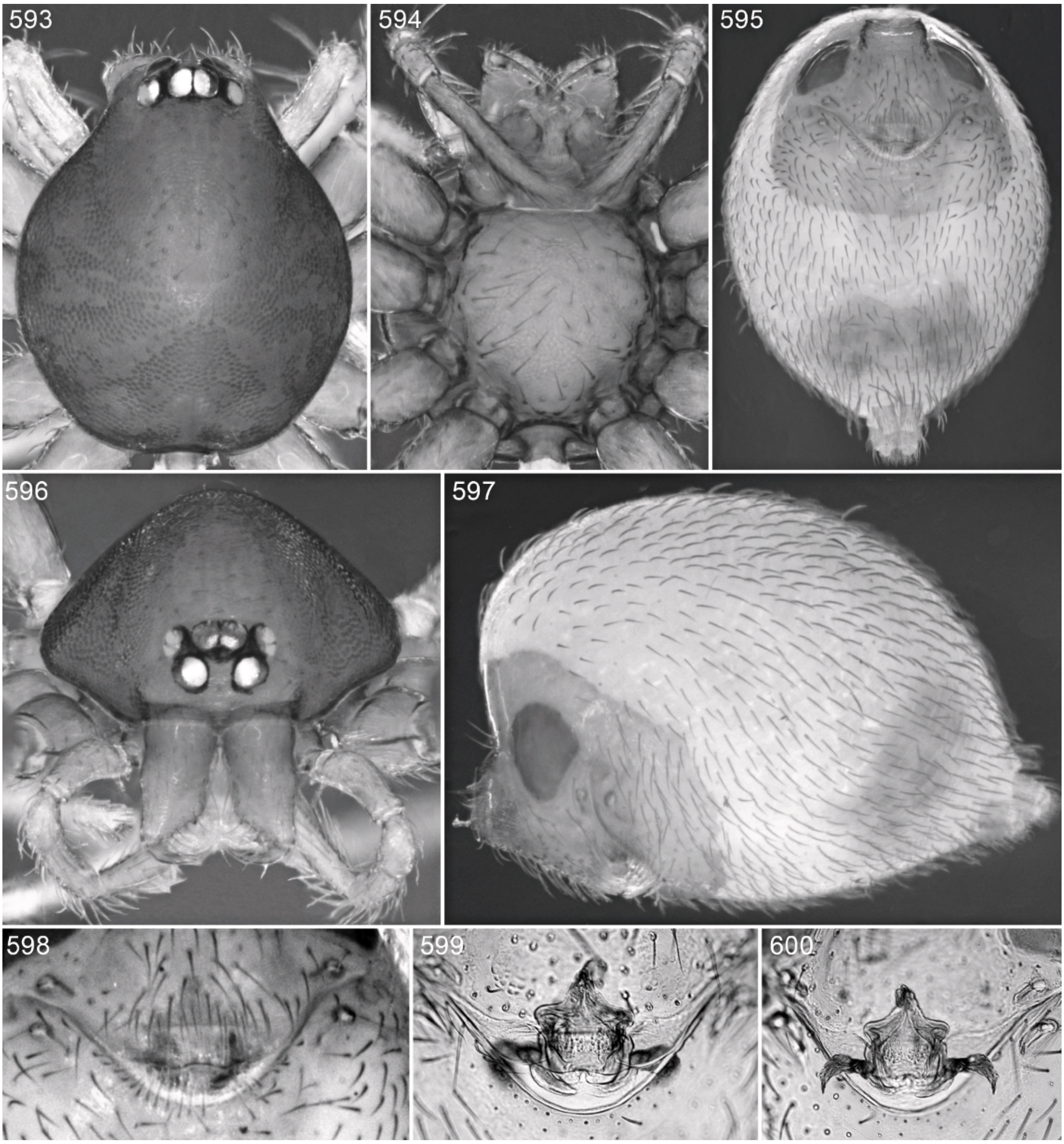
TYPE: Male holotype from Berlese sample of forest litter taken at an elevation of 250 m at Limoncocha, Sucumbíos, Ecuador (June



Figs. 566–579. *Paradysderina dracula*, new species, male (566–572) and female (573–579). **566.** Carapace, dorsal view. **567, 574.** Same, anterior view. **568.** Sternum and mouthparts, ventral view. **569.** Left embolus, prolateral view. **570.** Left palp, prolateral view. **571.** Same, ventral view. **572.** Same, retrolateral view. **573.** Habitus, dorsal view. **575.** Abdomen, ventral view. **576.** Same, lateral view. **577, 578.** Epigastric region, ventral view. **579.** Same, dorsal view.



Figs. 580–592. *Paradysderina pecki*, new species, male (580–586) and female (587–592). **580.** Carapace, dorsal view. **581, 587.** Same, anterior view. **582.** Sternum and mouthparts, ventral view. **583.** Mouthparts, posterior view. **584.** Left palp, prolateral view. **585.** Same, ventral view. **586.** Same, retrolateral view. **588.** Abdomen, lateral view. **589.** Same, ventral view. **590, 591.** Epigastric region, ventral view. **592.** Same, dorsal view.



Figs. 593–600. *Paradysderina sucumbios,* new species, female. **593.** Carapace, dorsal view. **594.** Sternum and mouthparts, ventral view. **595.** Abdomen, ventral view. **596.** Carapace, anterior view. **597.** Abdomen, lateral view. **598, 599.** Epigastric region, ventral view. **600.** Same, dorsal view.

25, 1976; S. Peck), deposited in FMNH (PBI_OON 37838).

ETYMOLOGY: The specific name is a patronym in honor of Stewart Peck, collector of the type.

DIAGNOSIS: Males have a long embolus that originates on the posterior half of the palpal bulb (figs. 584–586) and appear to have a dorsal spine and more ventrally situated median ledges on the chelicerae (fig. 581); females have a distinctive V-shaped sclerotization along the posterior margin of the genital atrium (figs. 591, 592).

MALE (PBI_OON 37838, figs. 580–586): Total length 1.43. Elevated portion of pars cephalica granulate. Chilum triangular.

Anterior ledge on paturon rounded, inner surface with small dorsal and large ventral, medially directed spines. Endites with ventral process wider, longer than dorsal process. Leg spination: femur I p0-0-1; tibiae: I v4-4-0, II v4-2-0; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus long, originating on posterior half of palpal bulb, distally sinuous.

Female (PBI_OON 10210, figs. 587–592): Total length 1.61. Postepigastric scutum only around epigastric furrow, fused to epigastric scutum, seam present between lateral edge of posterior spiracle and lateral margin of postepigastric scutum. Leg spination: femur I p0-0-2, r0-1-0; tibiae: I v4-4-0, II v4-4-1p; metatarsi I, II v2-2-1p. Posterior margin of genitalic atrium with triangular sclerotization along midline; anterior margin with rectangular sclerotization.

Other Material Examined: **Ecuador:** *Sucumbíos:* Limoncocha, June 21, 1976, Berlese, *Bactris* spiny palm, elev. 250 m (S. Peck, FMNH PBI_OON 10567), 1♀, June 25, 1976, Berlese, sifted African palm nuts on ground (S., J. Peck, FMNH 33708, PBI_OON 10210), 1♀.

Distribution: Northern Ecuador (Sucumbíos).

Paradysderina sucumbios, new species
Figures 593–600

Type: Female holotype taken from soil at an elevation of 3040 m at Santa Barbara, 0.63992°S, 77.50762°W, Sucumbíos, Ecuador (Dec. 14, 2009, E. Tapia), deposited in QCAZ (PBI_OON 10752).

Etymology: The specific name is a noun in apposition taken from the type locality.

Diagnosis: Females have distinctive, triangular lateral sclerotizations in the genital atrium (figs. 599, 600).

Male: Unknown.

Female (PBI_OON 10752, figs. 593–600): Total length 2.20. Elevated portion of pars cephalica appears reticulate. Chilum small, triangular. Postepigastric scutum covering about one-third of abdomen length, fused to epigastric scutum. Leg spination: femur I p0-0-2; tibiae: I v4-4-2, II v4-4-1p; metatarsi: I v2-2-2, II v2-2-1p. Atrium with triangular lateral sclerotizations situated at sides of parentheses-shaped apodemes.

Other Material Examined: None.

Distribution: Northern Ecuador (Sucumbíos).

KEY TO SPECIES FROM COLOMBIA

1.	Males (those of *huila* unknown)	2
–	Females (those of *imir*, *pira*, *chingaza*, *carrizal*, and *chinacota* unknown)	12
2.	Clypeus with pair of anterior projections (fig. 604).	3
–	Clypeus without such projections	5
3.	Embolus narrowed into hook distally (figs. 612, 614)	*pinzoni*
–	Embolus otherwise	4
4.	Embolus widened distally (fig. 607) . . .	*imir*
–	Embolus not widened distally (fig. 648)	*vaupes*
5.	Palps asymmetrical	6
–	Palps symmetrical	9
6.	Left embolus greatly narrowed distally (figs. 689, 737)	7
–	Left embolus blunt distally (figs. 713, 725) . . .	8
7.	Left embolus widest near tip (fig. 737)	*chinacota*
–	Left embolus widest near middle (fig. 692)	*boyaca*
8.	Tip of right embolus very narrow (fig. 731)	*monstrosa*
–	Tip of right embolus wider (fig. 719) . . .	*carrizal*
9.	Embolus long, narrow (fig. 641)	*pira*
–	Embolus otherwise	10
10.	Embolus greatly expanded distally (fig. 627)	*leticia*
–	Embolus otherwise	11
11.	Embolus relatively wide (fig. 670) . . .	*chingaza*
–	Embolus relatively narrow (fig. 677) . . .	*globosa*
12.	Genitalic atrium enlarged, almost semicircular (figs. 682, 700, 706)	13
–	Genitalic atrium smaller.	15
13.	Genitalic atrium with long median sclerotization (figs. 682, 700)	14
–	Genitalic atrium without median sclerotization (fig. 706)	*monstrosa*
14.	Median sclerotization W-shaped (fig. 700)	*boyaca*
–	Median sclerotization nail shaped (fig. 682)	*globosa*
15.	Postepigastric scutum with median sclerotization (fig. 619)	*pinzoni*
–	Postepigastric scutum without median sclerotization.	16
16.	Genitalic atrium very short (figs. 661, 662)	*huila*
–	Genitalic atrium longer (figs. 632, 653) . . .	17
17.	Postepigastric scutum separated from epigastric scutum at sides (fig. 630)	*leticia*

– Postepigastric scutum fused to epigastric scutum (fig. 651) . . . . *vaupes*

Paradysderina imir, new species
Figures 601–608

TYPE: Male holotype from Winkler sample taken at an elevation of 150 m at Matamata, Parque Nacional Natural Amacayacu, 3°23′S, 70°06′W, Amazonas, Colombia (June 9–11, 2000; A. Parente), deposited in IAVH (10811, PBI_OON 610).

ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: Males resemble those of *P. vlad*, *P. pinzoni*, and *P. vaupes* in having paired projections on the clypeus (figs. 601, 604) but have a narrower ventral embolar flange (figs. 603, 606–608).

MALE (PBI_OON 610, figs. 601–608): Total length 1.38. Elevated portion of pars cephalica appears reticulate. Chilum small, triangular, clypeus with pair of sharply pointed projections situated at about midpoint of paturon. Inner surface of paturon strongly excavated, bearing medially directed, heavily sclerotized spines, spines overlapping; soft cuticle just ventral to chilum with long, narrow, heavily sclerotized projection. Endites with both ventral and dorsal processes long, abruptly narrowed at about half their length. Leg spination: femur I p0-0-1; tibiae: I v4-4-0, II v4-2-0; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus greatly expanded distally, dorsoventral size at tip equal to that of bulb.

FEMALE: Unknown.

OTHER MATERIAL EXAMINED: **Colombia:** *Amazonas:* Comunidad Mocagua, Leticia, Nov. 7, 2004, elev. 106 m (L. Benavides, G. Giribet, ICN 4108, PBI_OON 611), 1♂.

DISTRIBUTION: Southern Colombia (Amazonas).

Paradysderina pinzoni, new species
Figures 609–621

TYPES: Male holotype and female allotype from Quebrada el Ayo, La Pedrera, 1°35′S, 69°31′W, Amazonas, Colombia (May 2002; J. Pinzon), deposited in ICN (2222, PBI_OON 612).

ETYMOLOGY: The specific name is a patronym in honor of Jaime Pinzón, collector of the types and sorter of many Colombian oonopids.

DIAGNOSIS: Males resemble those of *P. vlad* and *P. imir*, but have sharper clypeal projections (figs. 609, 610) and a much longer embolus (figs. 612–615); females have distinctive sclerotizations extending almost the full length of the postepigastric scutum (figs. 618–621).

MALE (PBI_OON 612, figs. 609–615): Total length 1.36. Elevated portion of pars cephalica appears reticulate. Chilum small, triangular, clypeus with pair of long, sharply pointed projections situated at about half of paturon width. Inner surface of paturon strongly excavated, inner margin bearing long, wide, dorsomedially directed, heavily sclerotized spines, right and left spines overlapping. Endites with ventral and dorsal processes divergent, dorsal process wider than ventral. Leg spination: femur I p0-0-1; tibiae: I v4-3-0, II v4-2-0; metatarsi I, II v2-2-0. Palps symmetrical; embolus elongated, originating on basal half of bulb, with sharply pointed ventral projection.

FEMALE (PBI_OON 612, figs. 616–621): Total length 1.50. Postepigastric scutum covering about one-third of abdomen length, fused to epigastric scutum. Leg spination: femur I p0-0-2; tibiae I, II v4-4-0; metatarsi: I v2-2-1p, II v2-2-0. Both anterior and posterior receptacula visible through cuticle as distinctive sclerotizations, both wide, posterior receptaculum long, extending almost to posterior margin of postepigastric scutum, more than three times length of atrium.

OTHER MATERIAL EXAMINED: One female taken with the types.

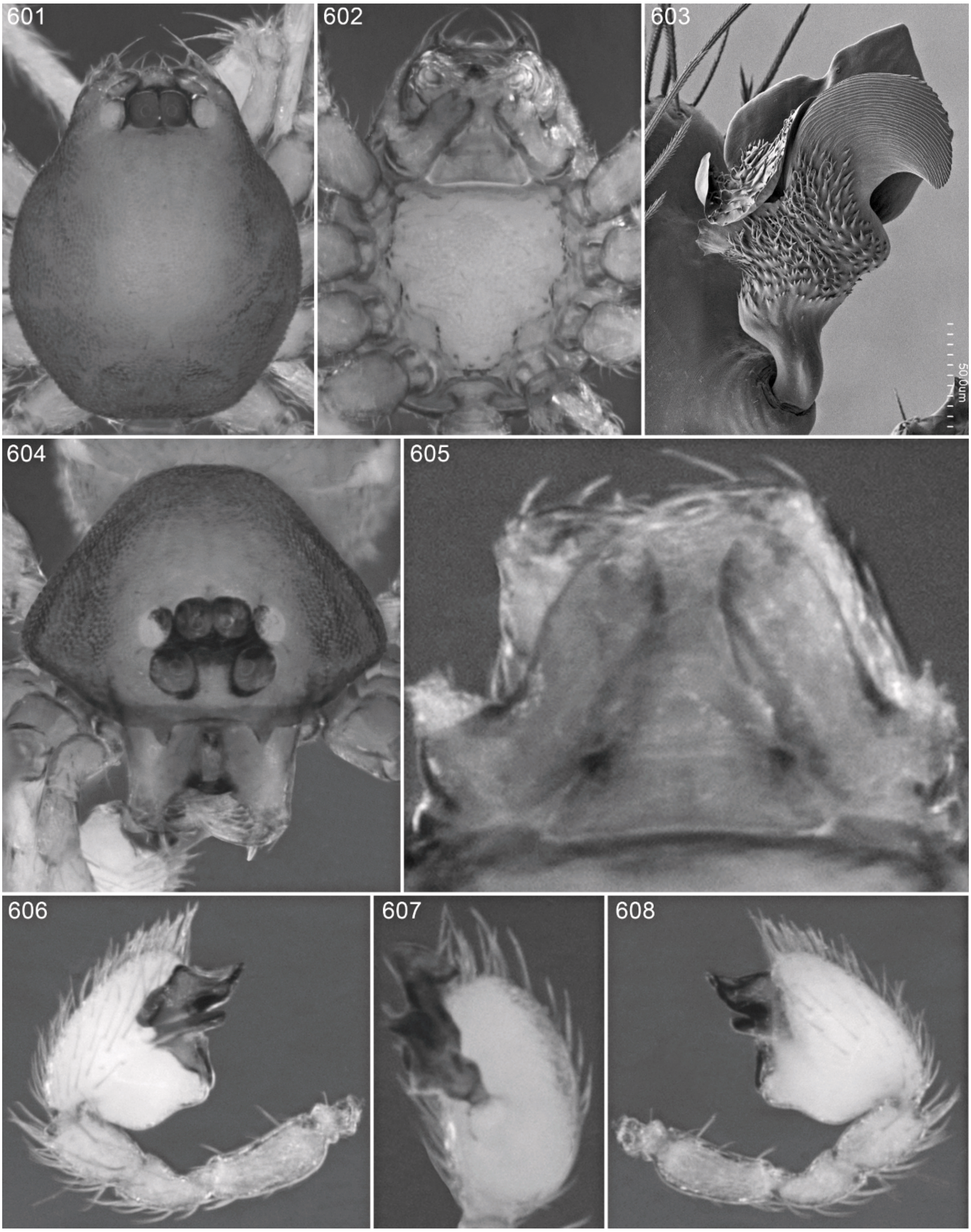
DISTRIBUTION: Southern Colombia (Amazonas).

Paradysderina leticia, new species
Figures 622–634

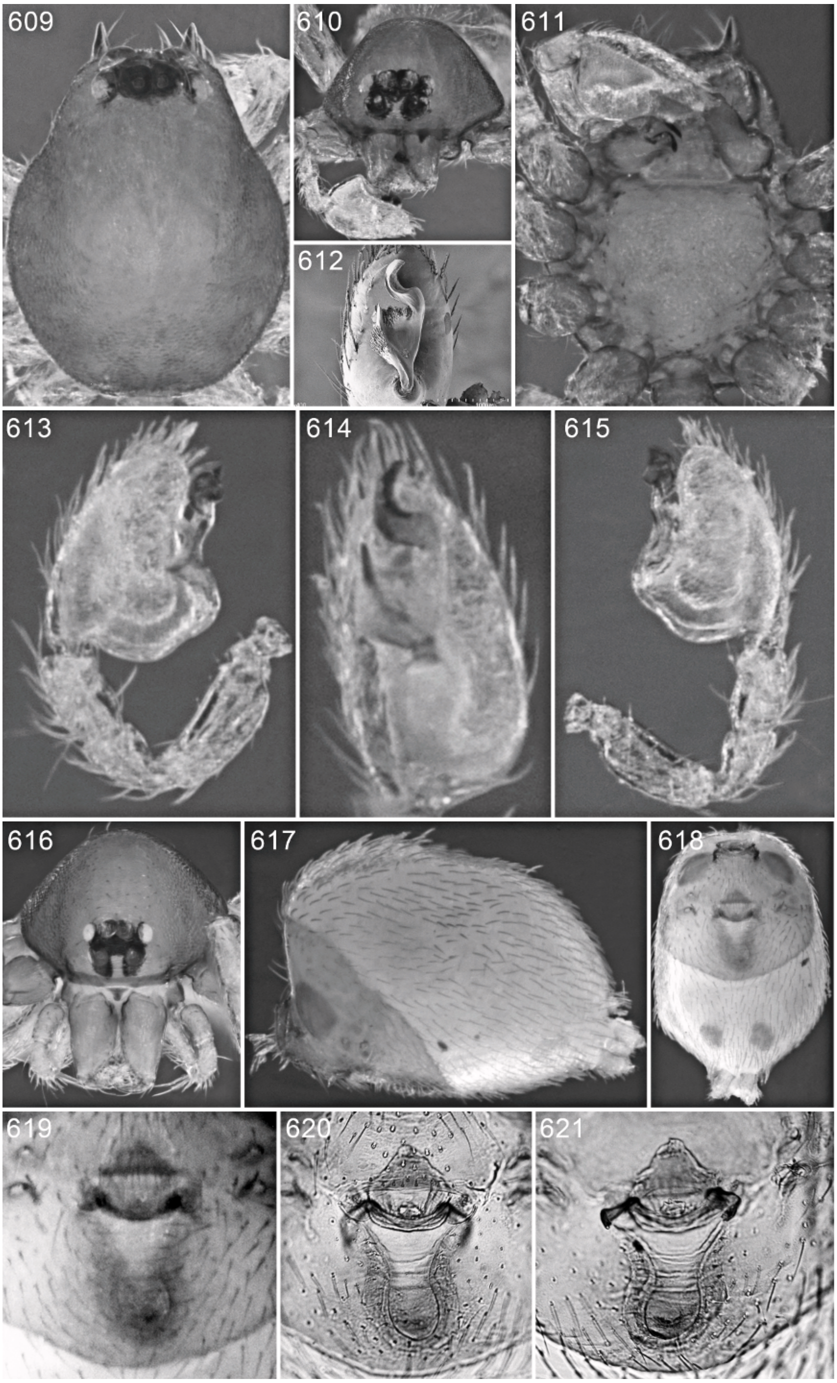
TYPES: Male holotype and female allotype from Berlese sample taken 7 km north of Leticia, Amazonas, Colombia (Feb. 20–25, 1972; S., J. Peck), deposited in AMNH (PBI_OON 37064).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

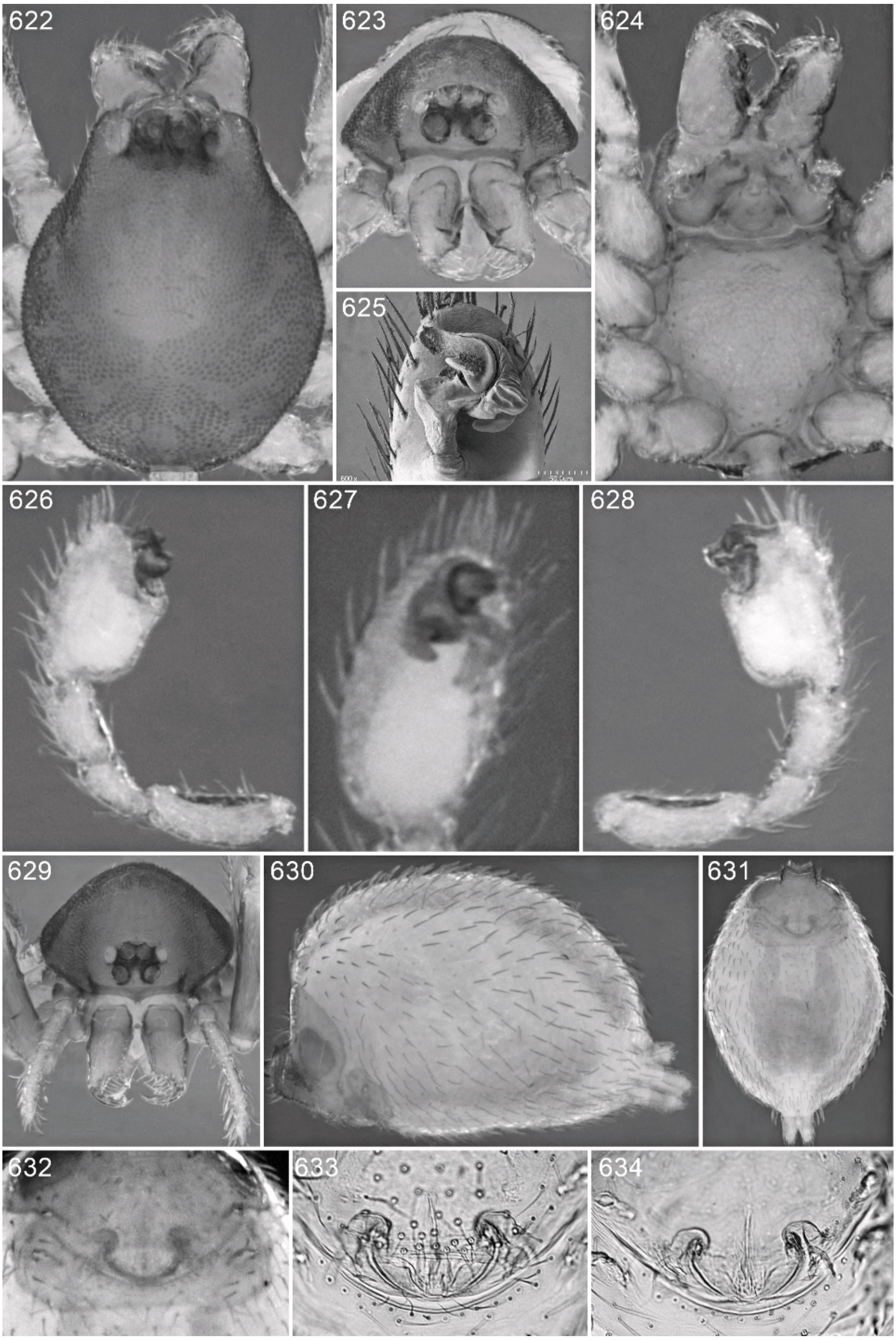
DIAGNOSIS: Males have long median ridges, terminating in dorsally directed



Figs. 601–608. *Paradysderina imir,* new species, male. **601.** Carapace, dorsal view. **602.** Cephalothorax, anterior view. **603.** Left embolus, prolateral view. **604.** Carapace, anterior view. **605.** Mouthparts, ventral view. **606.** Left palp, prolateral view. **607.** Same, ventral view. **608.** Same, retrolateral view.



Figs. 609–621. *Paradysderina pinzoni*, new species, male (609–615) and female (616–621). **609.** Carapace, dorsal view. **610, 616.** Same, anterior view. **611.** Sternum and mouthparts, ventral view. **612.** Left embolus, ventral view. **613.** Left palp, prolateral view. **614.** Same, ventral view. **615.** Same, retrolateral view. **617.** Abdomen, lateral view. **618.** Same, ventral view. **619, 620.** Epigastric region, ventral view. **621.** Same, dorsal view.



Figs. 622–634. *Paradysderina leticia*, new species, male (622–628) and female (629–634). **622.** Carapace, dorsal view. **623, 629.** Same, anterior view. **624.** Sternum and mouthparts, ventral view. **625.** Left embolus, ventral view. **626.** Left palp, prolateral view. **627.** Same, ventral view. **628.** Same, retrolateral view. **630.** Abdomen, lateral view. **631.** Same, ventral view. **632, 633.** Epigastric region, ventral view. **634.** Same, dorsal view.

spines, on the chelicerae (fig. 623) and a highly curved embolus originating on a relatively short palpal bulb (figs. 625–628); females have a large, U-shaped sclerotization occupying the lateral and posterior margins of the genital atrium (figs. 632–634).

MALE (PBI_OON 37064, figs. 622–628): Total length 1.45. Elevated portion of pars cephalica granulate. Chilum tiny, triangular. Inner surface of paturon deeply excavated, inner margin with two dorsally directed, heavily sclerotized spines. Endites with ventral process much wider than dorsal process. Leg spination: femur I p0-0-2; tibiae: I v4-4-0, II v4-2-0; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus originating ventrally on relatively small bulb, strongly bent at base, with recurved tip.

FEMALE (PBI_OON 37064, figs. 629–634): Total length 1.72. Postepigastric scutum only around epigastric furrow, not fused to epigastric scutum. Leg spination: femora: I p0-0-2, r0-1-1, II p0-0-1, r0-1-0; tibiae: I v4-4-1p, II v4-4-0; metatarsi I, II v2-2-2. U-shaped sclerotization occupying lateral and posterior margins of atrium.

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Southern Colombia (Amazonas).

Paradysderina pira, new species
Figures 635–642

TYPE: Male holotype from Río Pira and Apaporis, 0°25′S, 70°15′W, Amazonas, Colombia (Feb. 7–16, 1989; V., B. Roth), deposited in CAS (PBI_OON 2737).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males can be recognized by their extraordinarily *Scaphiella*-like palp, with a long, narrow, simple, and evenly curved embolus (figs. 639–642).

MALE (PBI_OON 2737, figs. 635–642): Total length 1.32. Elevated portion of pars cephalica appears reticulate. Chilum tiny, triangular. Inner margin of paturon weakly excavated. Endites with dorsal process wider, longer than ventral process. Leg spination: femur I p0-0-1; tibiae: I v4-4-0, II v4-2-0; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus *Scaphiella*-like, long, narrow, distally sinuous.

FEMALE: Unknown.

DISTRIBUTION: Southern Colombia (Amazonas).

Paradysderina vaupes, new species
Figures 643–655

TYPES: Male holotype and female allotype from the Estación Biológica Caparú, Lago Taraira, below Río Apaporis, 1°04′N, 69°29′W, Vaupés, Colombia (Apr. 2, 2004; J. Pinzón), deposited in ICN (PBI_OON 613).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males share sharply pointed clypeal extensions with *P. pinzoni* (figs. 643, 644) but have a more club-shaped embolus (figs. 646–649); females have a wide anterior genitalic process (figs. 653–655).

MALE (PBI_OON 613, figs. 643–649): Total length 1.51. Elevated portion of pars cephalica appears reticulate. Chilum tiny, triangular, clypeus with pair of sharply pointed projections, each situated at about half of paturon width. Inner margin of paturon excavated, with wide, obliquely directed, heavily sclerotized spine. Endites with ventral and dorsal processes long, narrow. Leg spination: femur I p0-0-1; tibiae: I v4-3-0, II v4-2-0; metatarsi: I v2-2-1p, II v2-2-0. Palps symmetrical; embolus long, originating on basal half of bulb, club shaped.

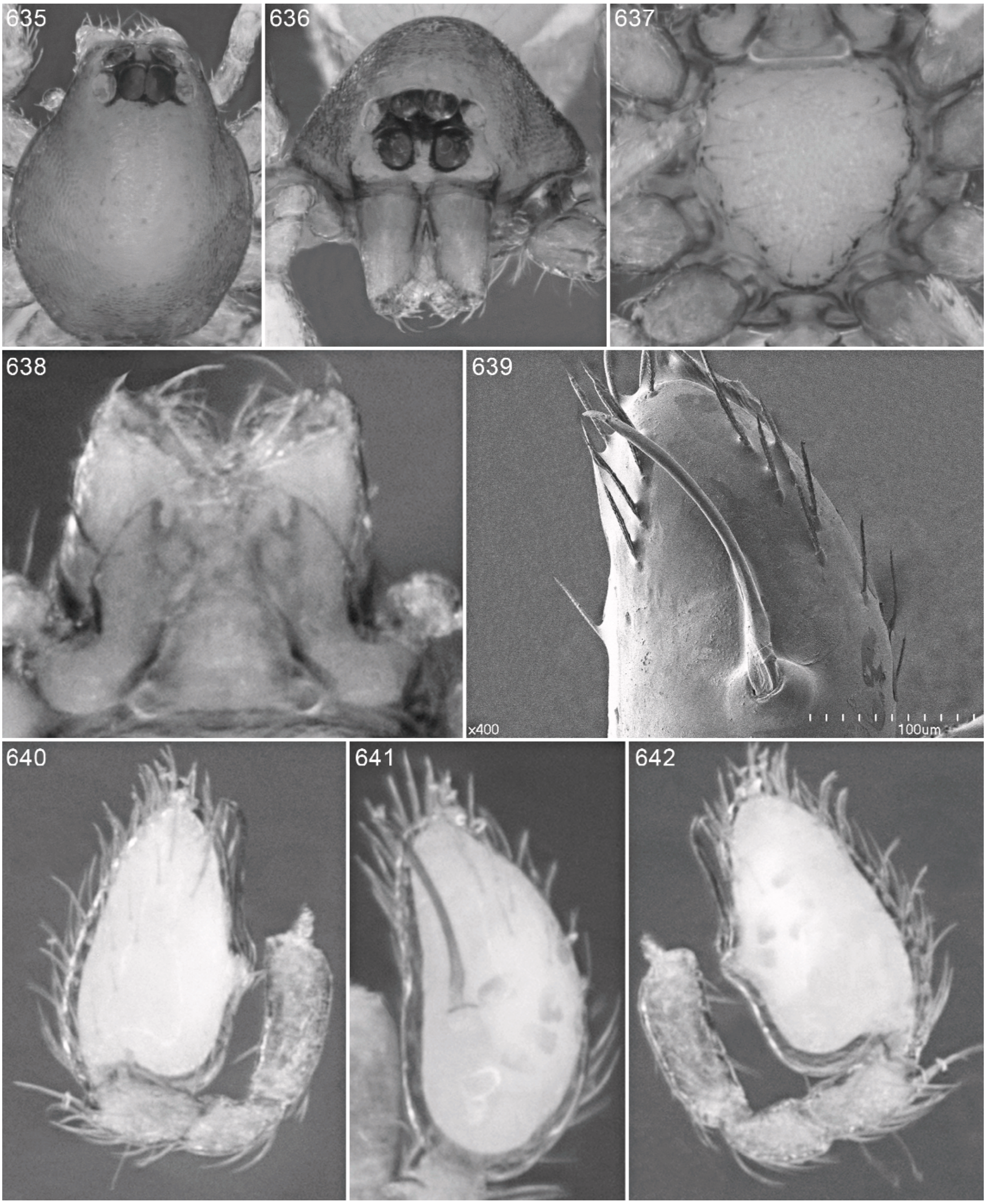
FEMALE (PBI_OON 613, figs. 650–655): Total length 1.69. Chilum small. Postepigastric scutum covering about one-third of abdomen length, fused to epigastric scutum. Leg spination: femur I p0-0-2; r0-1-0; tibiae: I v4-4-1p, II v4-2-0; metatarsi: I v2-2-1p, II v2-0-2. Anterior genitalic process wide, with heavily sclerotized lateral edges.

OTHER MATERIAL EXAMINED: Seven males and one female taken with the types (ICN, AMNH).

DISTRIBUTION: Southern Colombia (Vaupés).

Paradysderina huila, new species
Figures 656–663

TYPE: Female holotype from montane forest litter taken at an elevation of 1600 m at Resinas, 1°55′N, 75°42′W, Huila, Colombia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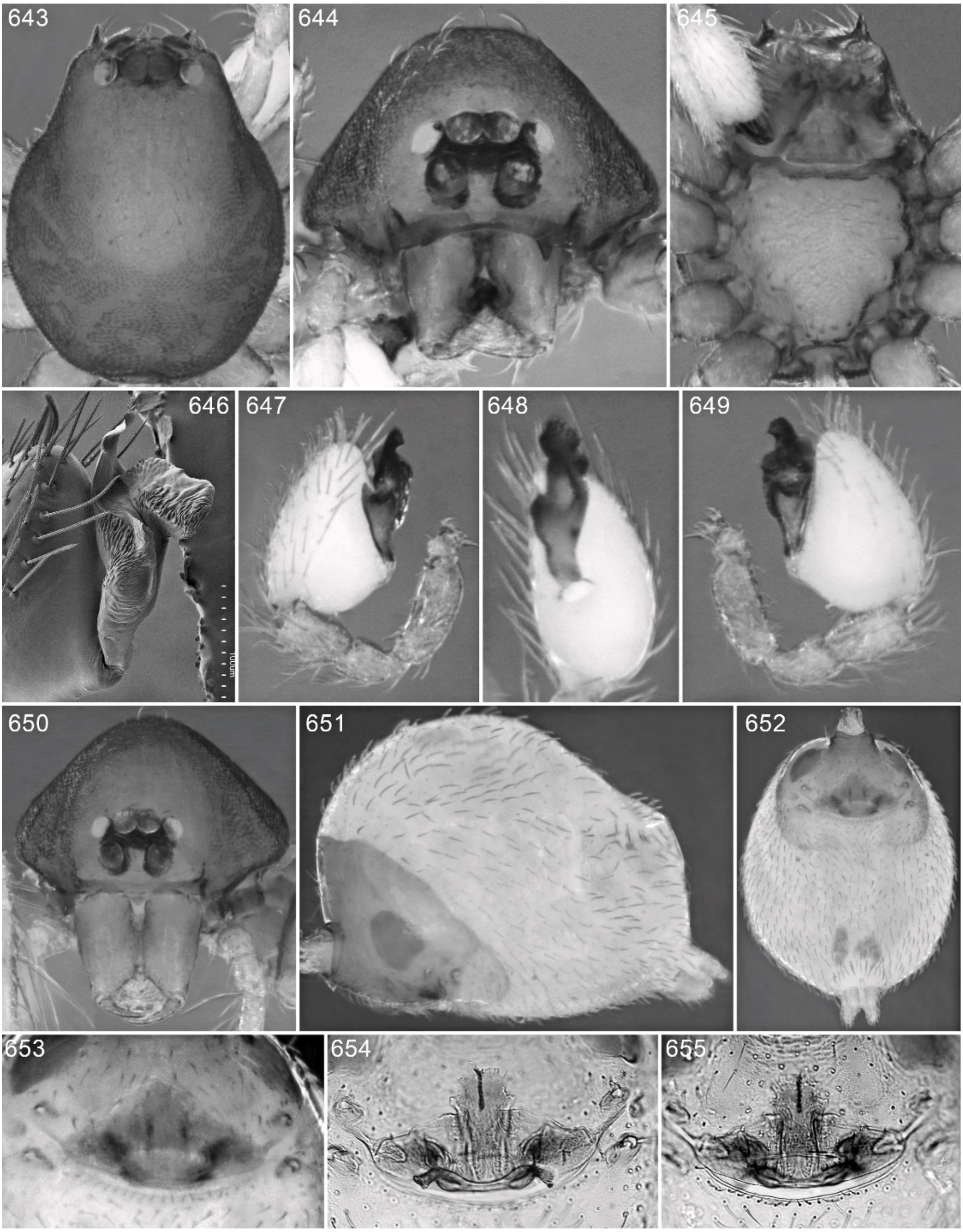
Figs. 635–642. *Paradysderina pira,* new species, male. **635.** Carapace, dorsal view. **636.** Same, anterior view. **637.** Sternum ventral view. **638.** Mouthparts, ventral view. **639.** Left embolus, ventral view. **640.** Left palp, prolateral view. **641.** Same, ventral view. **642.** Same, retrolateral view.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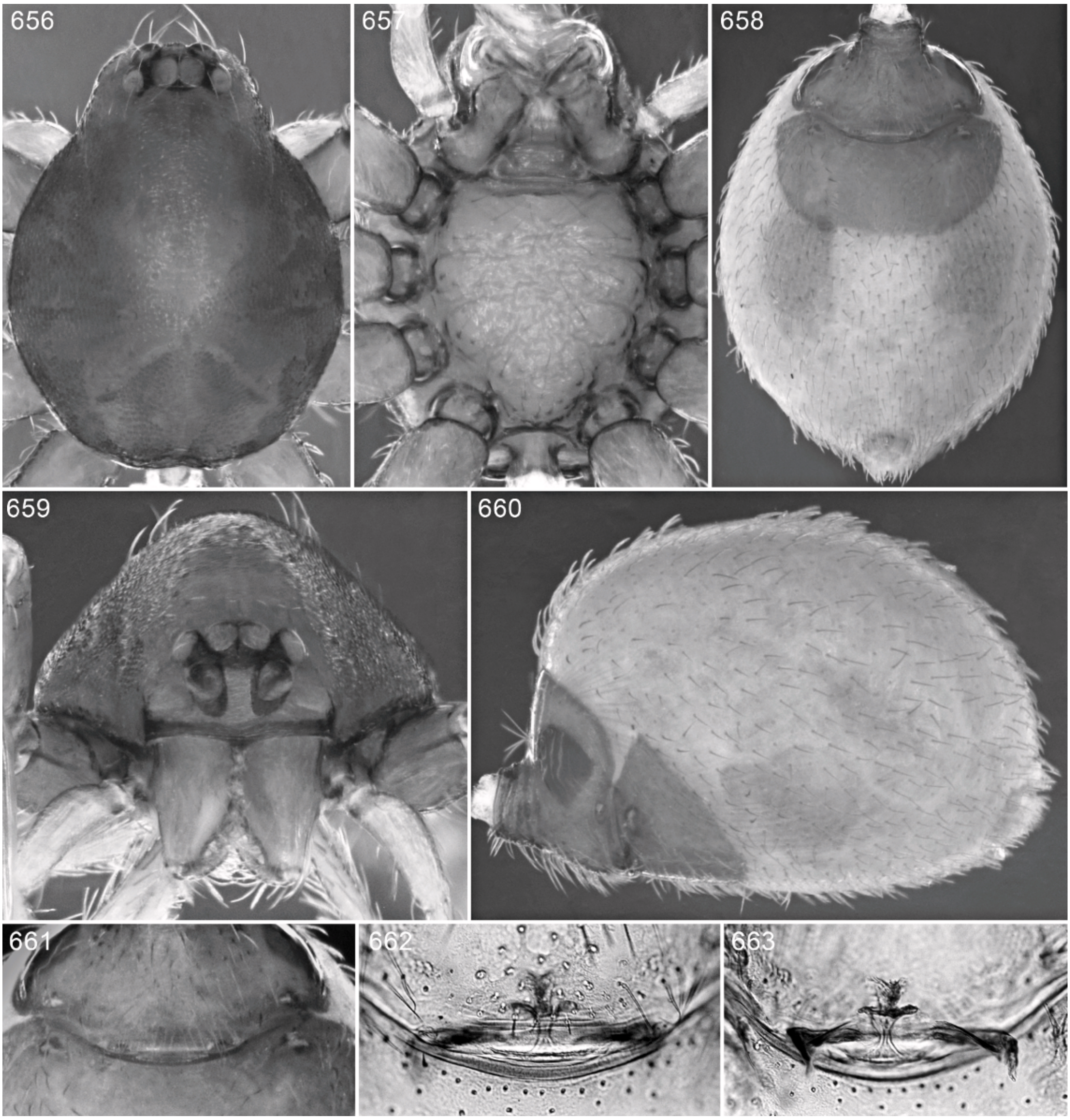
Figs. 643–655. *Paradysderina vaupes*, new species, male (643–649) and female (650–655). **643.** Carapace, dorsal view. **644, 650.** Same, anterior view. **645.** Sternum and mouthparts, ventral view. **646.** Left embolus, prolateral view. **647.** Left palp, prolateral view. **648.** Same, ventral view. **649.** Same, retrolateral view. **651.** Abdomen, lateral view. **652.** Same, ventral view. **653, 654.** Epigastric region, ventral view. **655.** Same, dorsal view.



Figs. 656–663. *Paradysderina huila,* new species, female. **656.** Carapace, dorsal view. **657.** Sternum and mouthparts, ventral view. **658.** Abdomen, ventral view. **659.** Carapace, anterior view. **660.** Abdomen, lateral view. **661, 662.** Epigastric region, ventral view. **663.** Same, dorsal view.

(June 8, 1956; H. Sturm), deposited in MCZ (PBI_OON 37014).

Etymology: The specific name is a noun in apposition taken from the type locality.

Diagnosis: Females of this relatively large species have a distinctively short, slit-shaped genital atrium (figs. 661–663). The details of the sternal microsculpture make it unlikely that this could be the female of any the five Colombian species known only from males.

Male: Unknown.

Female (PBI_OON 37014, figs. 656–663): Total length 2.50. Elevated portion of pars cephalica appears reticulate. Chilum tiny, triangular. Postepigastric scutum covering about one-third of abdomen length, not fused to epigastric scutum. Leg spination: femora: I p0-0-2; r0-1-0, II p0-0-1; tibiae: I v4-4-2, II v4-4-1p; metatarsi: I v2-2-2, II v2-2-0. Atrium reduced to wide, short strip.

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Central Colombia (Huila).

Paradysderina chingaza, new species
Figures 664–671

TYPE: Male holotype taken from dung trap at an elevation of 2990 m at San José, on the road to San Juanito, in the Parque Nacional Natural Chingaza, 4°29′38″N, 73°41′33″W, Meta, Colombia (Nov. 22–24, 2003; I. Quintero, M. Torres), deposited in IAVH (108170, PBI_OON 614).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males have a distinctively flared embolus (figs. 668–671).

MALE (PBI_OON 614, figs. 664–671): Total length 1.93. Elevated portion of pars cephalica appears reticulate. Chilum short, wide, triangular. Inner surface of paturon slightly excavated, with slight tubercle at level of short, wide process in soft tissue separating chelicerae. Endites with ventral process short, wide, dorsal process broadly triangular, with medially directed tip. Leg spination: femur I p0-0-1; tibiae: I v4-4-0, II v2-4-0; metatarsi: I v2-2-1p, II v2-0-2. Palps symmetrical; embolus relatively short, distally wide.

FEMALE: UNKNOWN.

OTHER MATERIAL EXAMINED: **Colombia:** *Meta:* San José, Parque Nacional Natural Chingaza, 4°29′38″N, 73°41′33″W, Nov. 22–24, 2003, pitfall, forest, elev. 2990 m (I. Quintero, M. Torres, IAVH 108171, PBI_OON 615), 1♂, same, dung trap (IAVH 108164, PBI_OON 616), 1♂.

DISTRIBUTION: Central Colombia (Meta).

Paradysderina globosa (Keyserling), new combination
Figures 672–684

Oonops globosus Keyserling, 1877: 232, pl. 7, fig. 6, 6a–d (female holotype from Colombia [as "New-Granada"], no further data, in BMNH; examined).

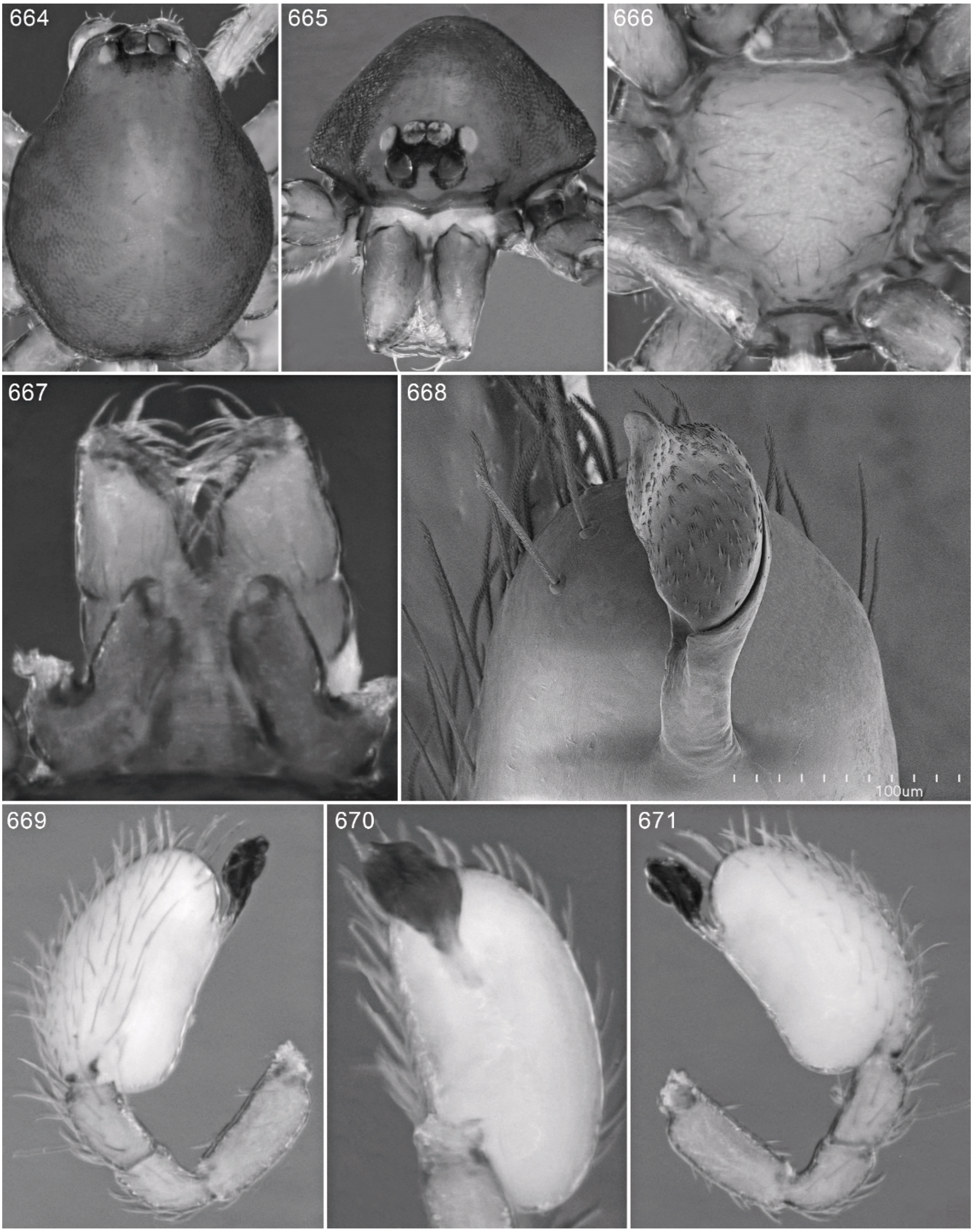
Dysderina globosa: Simon, 1893: 304.

DIAGNOSIS: Males have a distinctively sail-shaped embolus (figs. 675–678); females have a wide genital atrium with a tripartite posteromedian sclerotization (figs. 682–684).

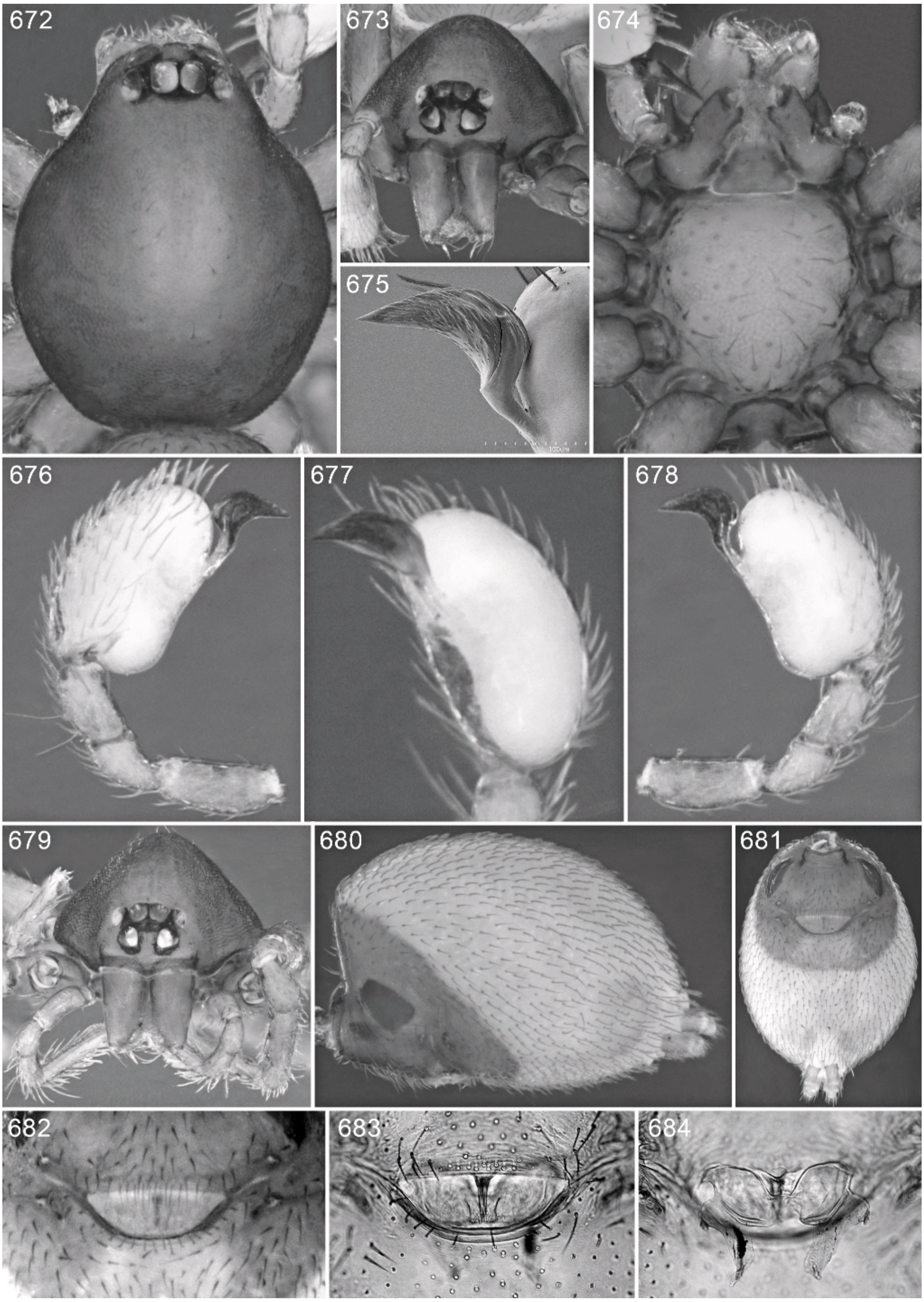
MALE (PBI_OON 621, figs. 672–678): Total length 1.84. Elevated portion of pars cephalica appears reticulate. Chilum broad, triangular. Paturon slightly excavated along inner margin. Endites with both processes wide at base, gradually narrowed toward tip. Leg spination: femur I p0-0-2; tibiae I, II v4-4-0; metatarsi: I v2-2-1p, II v2-0-2. Palps symmetrical; embolus large, flat, sail shaped.

FEMALE (PBI_OON 621, figs. 679–684): Total length 2.03. Postepigastric scutum covering about one-third of abdomen length, fused to epigastric scutum. Leg spination: femur I p0-0-2; tibiae I, II v4-4-0; metatarsi: I v2-21-1p, II v2-0-2. Atrium large, semicircular; anterior genitalic process long, narrow.

MATERIAL EXAMINED: **Colombia:** *Cundinamarca:* Aguadita, Mar. 10, 1974 (L., N. Herman, AMNH PBI_OON 111), 1♂, 1♀; Cerro de Monserrate, Dec. 20, 2009, hand sorting litter, elev. 3165 m (E. Florez, L. Benavides, D. Luna, S. Castellanos, ICN 3553, PBI_OON 622), 2♂, 1♀; Charrascales, Parque Nacional Natural Chingaza, 4°31′N, 73°45′W, Oct. 2–4, 2001, pitfall, elev. 2990 m (L. Cifuentes, IAVH 108092, PBI_OON 618), 1♀; Facatativá road, Anolaima, July 15, 1967, cloud forest, elev. 2600 m (P., B. Wygodzinsky, AMNH PBI_OON 61), 1♀; Páramo de Cruz Verde, between Bogotá and Choachi, 4°34′30″N, 74°01′11″W, Feb. 21, 2010, between dry leaves of the composite *Espeletia grandiflora*, elev. 3367 m (E. Florez, D. Luna, C. Mattoni, A. Sabogal, ICN PBI_OON 623), 1♀; Páramo de Monserrate, Bogotá, Apr.–Nov. 1968, pitfalls (H. Sturm, AMNH PBI_OON 621), 3♂, 1♀, same, 1968–1969 (H. Sturm, AMNH PBI_OON 59), 3♂, 1♀; Páramo Parada del Viento, Cerro Redondo, Bogotá, May 15–19, 2008, pitfall, elev. 3100 m (Morales, ICN 2224, PBI_OON 46486), 1♂; Reserva Forestal Río Blanco, Palacio, Parque Nacional Natural Chingaza, 4°42′13″N, 73°51′4″W, Nov. 22–24, 2003, Winkler, forest, 2970 m (E. González, IAVH 108163, PBI_OON 620), 1♀; second watchtower on Sendero Suasie, Parque Nacional Natural Chingaza, Mar. 24, 2003, elev. 3130 m (J. Lepida, ICN 2212, PBI_OON 617), 1♂; Valle de los Feuilajones, Parque Nacional Natural Chingaza, Mar. 24,



Figs. 664–671. *Paradysderina chingaza,* new species, male. **664.** Carapace, dorsal view. **665.** Same, anterior view. **666.** Sternum ventral view. **667.** Mouthparts, ventral view. **668.** Left embolus, ventral view. **669.** Left palp, prolateral view. **670.** Same, ventral view. **671.** Same, retrolateral view.



Figs. 672–684. *Paradysderina globosa* (Keyserling), male (672–678) and female (679–684). **672.** Carapace, dorsal view. **673, 679.** Same, anterior view. **674.** Sternum and mouthparts, ventral view. **675.** Left embolus, retrolateral view. **676.** Left palp, prolateral view. **677.** Same, ventral view. **678.** Same, retrolateral view. **680.** Abdomen, lateral view. **681.** Same, ventral view. **682, 683.** Epigastric region, ventral view. **684.** Same, dorsal view.

2003 (D. Sanchez, ICN2213, PBI_OON 619), 1♀.

DISTRIBUTION: Central Colombia (Cundinamarca).

Paradysderina boyaca, new species
Figures 685–702

TYPES: Male holotype and female allotype from a Winkler sample taken at an elevation of 3350 m at Quebrada Carrizal, Santuario de Flora y Fauna de Iguaque, 5°25′N, 73°27′W, Boyacá, Colombia (Sept. 1–3, 2000; P. Reina), deposited in IAVH (108098, PBI_OON 625).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: This species, like the two that follow, resembles *P. globosa* in genitalic morphology; also like those two following species, the left and right emboli are consistently different. In *P. boyaca*, the left embolus terminates in a long, needlelike projection (fig. 689), whereas the right embolus terminates in a much shorter, thicker projection (fig. 690). The female genital atrium is almost as long as the postepigastric scutum and has a W-shaped posteromedian sclerotization (figs. 700–702).

MALE (PBI_OON 625, figs. 685–696): Total length 1.98. Elevated portion of pars cephalica appears reticulate. Chilum broad, triangular. Paturon with inner margin slightly excavated. Endites with dorsal process long, widely separated from ventral process. Leg spination: femur I p0-0-2; tibiae: I v4-4-0, II v4-2-0; metatarsi: I v2-2-1p, II v2-2-0. Left embolus terminating in long, needlelike projection, right embolus terminating in much shorter, thicker projection.

FEMALE (PBI_OON 625, figs. 697–702): Total length 2.11. Postepigastric scutum covering about one-third of abdomen length, fused to epigastric scutum. Leg spination: femur I p0-0-2; tibiae I, II v4-4-1p; metatarsi: I v2-2-2, II v2-0-2. Atrium large, semicircular; anterior genitalic process with W-shaped base.

OTHER MATERIAL EXAMINED: **Colombia:** *Boyacá:* Quebrada Carrizal, Santuario de Flora y Fauna de Iguaque, 5°25′N, 73°27′W, Dec. 4–6, 2000, Winkler, elev. 3350 m (P. Reina, IAVH 108096, PBI_OON 626), 1♂.

DISTRIBUTION: Central Colombia (Boyacá).

Paradysderina carrizal, new species
Figures 709–720

TYPE: Male holotype from a Winkler sample taken at an elevation of 2650 m at Cabaña Carrizal, Santuario de Flora y Fauna de Iguaque, 5°25′N, 73°27′W, Boyacá, Colombia (Feb. 2–24, 2001; G. Oliva), deposited in IAVH (108102, PBI_OON 627).

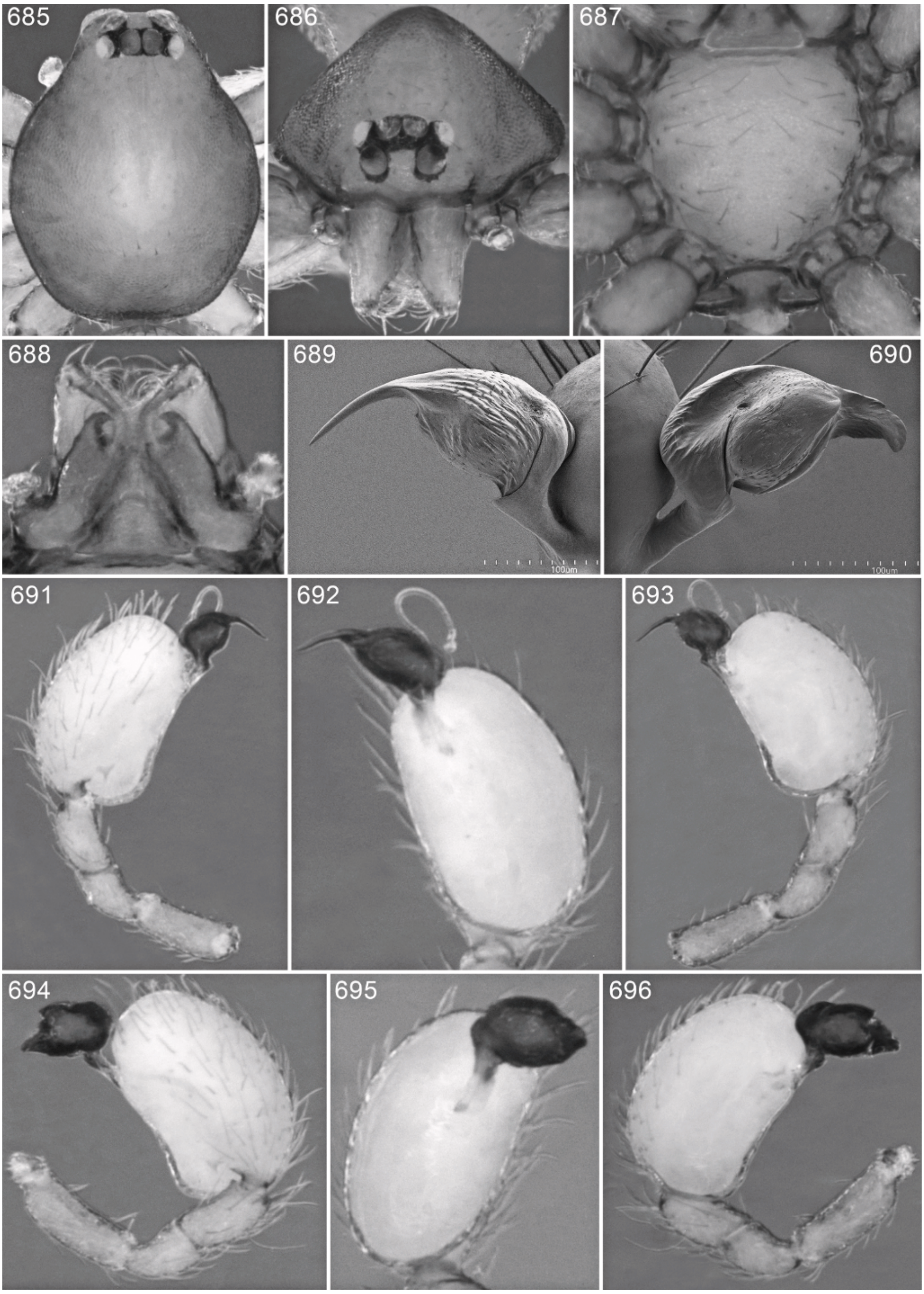
ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males can easily be recognized by their palpal dimorphism; the left embolus is boat shaped (fig. 713), whereas the right embolus is beak shaped (fig. 714).

MALE (PBI_OON 627, figs. 709–720): Total length 1.84. Elevated portion of pars cephalica appears reticulate. Chilum tiny, triangular. Anterior ledge of paturon with slight tubercle on median edge. Endites with dorsal process short, wide, widely separated from ventral process. Leg spination: femur I p0-0-2; tibiae: I v4-4-0, II v4-2-0; metatarsi: I v2-2-1p, II v2-0-2. Left embolus boat shaped, right embolus beak shaped.

FEMALE: Unknown.

OTHER MATERIAL EXAMINED: **Colombia:** *Boyacá:* Cabaña Carrizal, Santuario de Flora y Fauna de Iguaque, 5°25′N, 73°27′W, July 25–28, 2001, Winkler, elev. 2850 m (P. Reina, IAVH 108097, PBI_OON 630), 1♂, Oct. 13–18, 2001, Winkler, elev. 2850 m (P. Reina, IAVH 108093, PBI_OON 633), 1♂; Cerro Pan de Azúcar, Santuario de Flora y Fauna de Iguaque, 5°25′N, 73°27′W, Apr. 22–24, 2001, Winkler, elev. 3300 m (P. Reina, IAVH 108106, PBI_OON 629), 1♂, Oct. 13–18, 2001, Winkler, elev. 3300 m (P. Reina, IAVH 108103, PBI_OON 631), 1♂; La Planada, Santuario de Flora y Fauna de Iguaque, 5°25′N, 73°27′W, Jan. 21–28, 2001, Winkler, elev. 2850 m (G. Oliva, IAVH 108109, PBI_OON 628), 3♂, Nov. 3–5, 2001, Winkler, elev. 2850 m (P. Reina, IAVH 108107, PBI_OON 634), 1♂; Quebrada Los Francos, Santuario de Flora y Fauna de Iguaque, 5°25′N, 73°27′W, Mar. 9–15, 2001, Winkler, elev. 2860 m (G. Oliva, IAVH 108104,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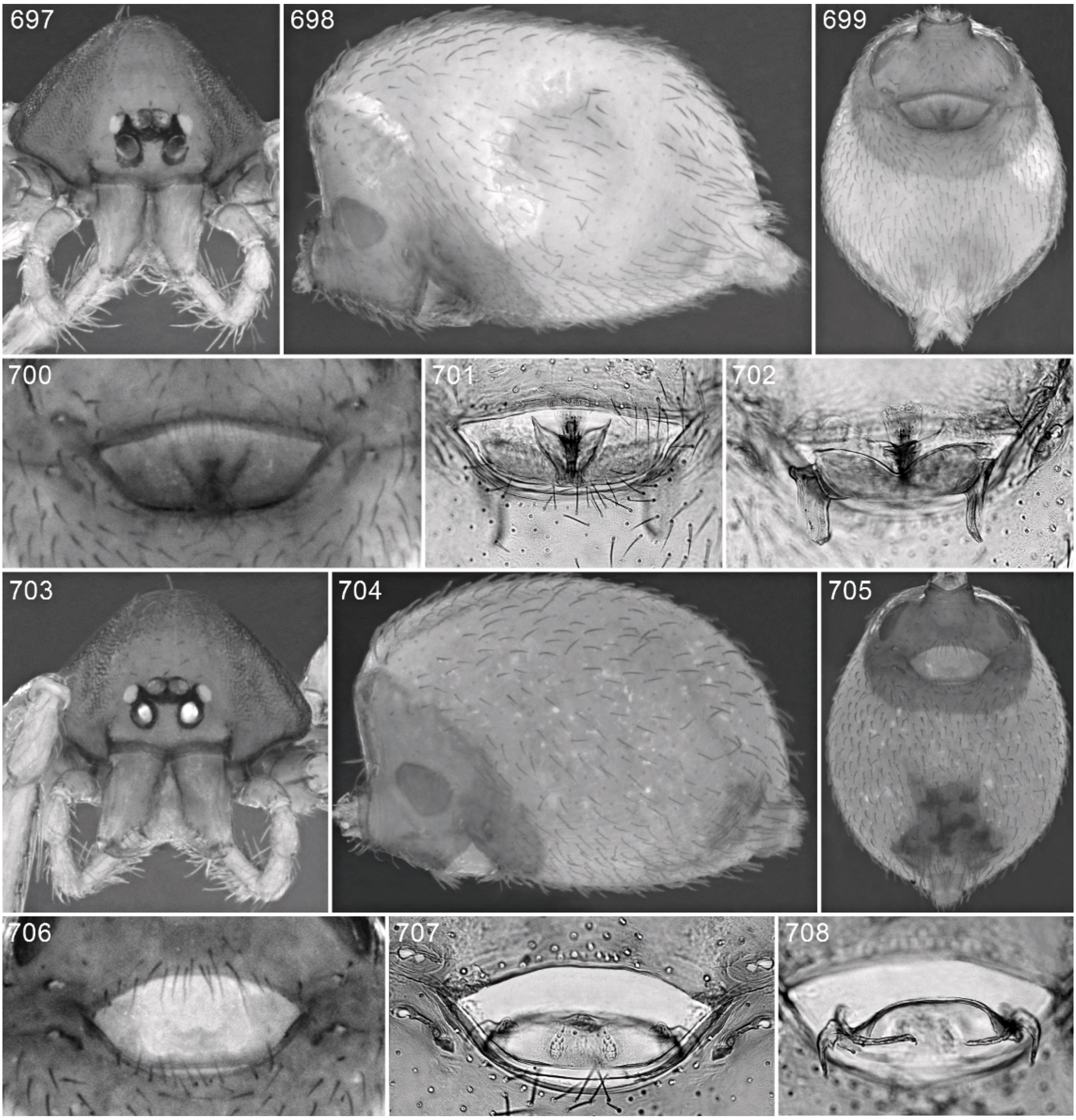
Figs. 685–696. *Paradysderina boyaca,* new species, male. **685.** Carapace, dorsal view. **686.** Same, anterior view. **687.** Sternum, ventral view. **688.** Mouthparts, ventral view. **689.** Left embolus, retrolateral view. **690.** Right embolus, retrolateral view. **691.** Left palp, prolateral view. **692.** Same, ventral view. **693.** Same, retrolateral view. **694.** Right palp, prolateral view. **695.** Same, ventral view. **696.** Same, retrolateral view.



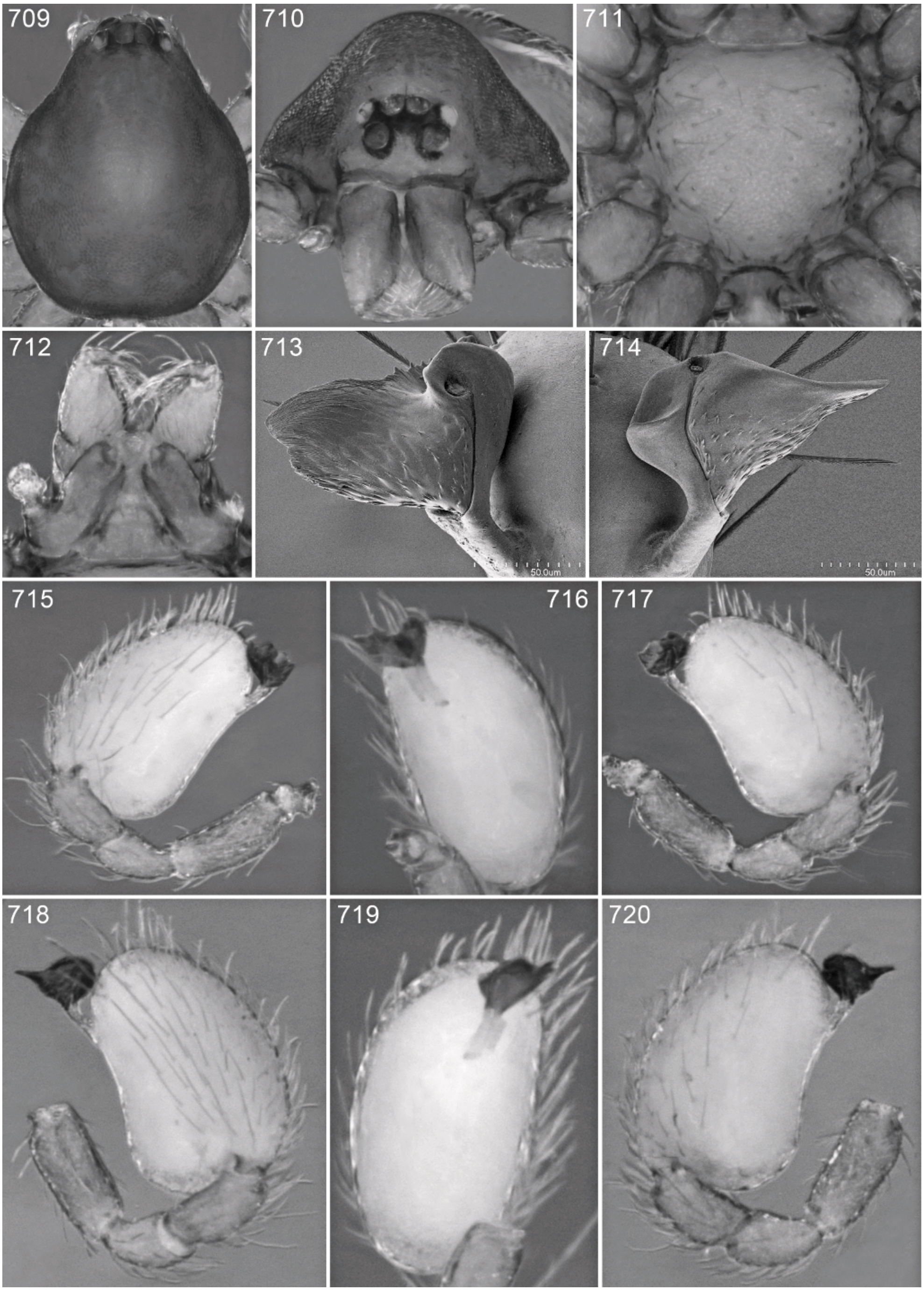
Figs. 697–708. *Paradysderina boyaca,* new species, female (697–702) and *P. monstrosa*, new species, female (703–708). **697, 703.** Carapace, anterior view. **698, 704.** Abdomen, lateral view. **699, 705.** Same, ventral view. **700, 701, 706, 707.** Epigastric region, ventral view. **702, 708.** Same, dorsal view.

PBI_OON 632), 1♂; track from Centro de Visitantes to Lagunas, Santuario de Flora y Fauna de Iguaque, 5°41′48″N, 73°27′21″W, Nov. 1, 2004, elev. 3000 m (L. Benavides, D. Campos, G. Giribet, ICN 2223, PBI_OON 635), 1♂.

Distribution: Central Colombia (Boyacá).

Paradysderina monstrosa, new species
Figures 703–708, 721–732

Types: Male holotype and female allotype from Winkler trap in secondary forest at an elevation of 3220 m at Sutamarchán, Serranía Marchán, 5°45′01″N, 73°40′02″W,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Figs. 709–720. *Paradysderina carrizal,* new species, male. **709.** Carapace, dorsal view. **710.** Same, anterior view. **711.** Sternum, ventral view. **712.** Mouthparts, ventral view. **713.** Left embolus, retrolateral view. **714.** Right embolus, retrolateral view. **715.** Left palp, prolateral view. **716.** Same, ventral view. **717.** Same, retrolateral view. **718.** Right palp, prolateral view. **719.** Same, ventral view. **720.** Same, retrolateral view.

Boyacá, Colombia (Apr. 7–9, 2003; E. González, C. Reina), deposited in IAVH (108122, PBI_OON 636).

ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: Males can easily be recognized by their palpal dimorphism; the left embolus is V-shaped (fig. 725), whereas the right embolus is blade shaped (fig. 726); females have a large genital atrium with a triangular posteromedian sclerotization (figs. 706–708).

MALE (PBI_OON 636, figs. 721–732): Total length 1.80. Elevated portion of pars cephalica appears reticulate. Chilum tiny, triangular. Anterior ledge of paturon obliquely oriented, with slight tubercle at inner edge. Endites with dorsal process much wider, longer than ventral process. Leg spination: femur I p0-0-1; tibiae: I v4-4-0, II v4-2-0; metatarsi: I v2-2-1p, II v2-2-0. Left embolus V-shaped, right embolus blade shaped.

FEMALE (PBI_OON 636, figs. 703–708): Total length 1.83. Postepigastric scutum only around epigastric furrow, fused to epigastric scutum. Leg spination: femur I p0-0-2; tibiae I, II v4-4-1p; metatarsi: I v2-2-1p, II v2-2-0. Atrium very large, longer than portion of postepigastric scutum posterior of atrium; base of anterior genitalic process short, triangular, restricted to posterior half of atrium.

OTHER MATERIAL EXAMINED: **Colombia:** *Boyacá:* Sutamarchán, Serranía Marchán, 5°45′01″N, 73°40′02″W, Apr. 7–9, 2003, Winkler, secondary forest, elev. 3220 m (E. González, C. Reina, IAVH 108115, PBI_OON 641), 2♂, 1♀, same (IAVH 108118, PBI_OON 642), 2♂. *Cundinamarca:* San Antonio del Tequendama, Valle La Maquino, Jan. 1998, pitfall trap, secondary forest, elev. 2000 m (S. Forero, ICN 2451, PBI_OON 46485), 1♂.

DISTRIBUTION: Central Colombia (Cundinamarca and Boyacá).

Paradysderina chinacota, new species

Figures 733–741

TYPE: Male holotype taken at an elevation of 8000 ft at a site 30 km S of Chinácota, Norte de Santander, Colombia (May 14, 1974; S. Peck), deposited in AMNH (PBI_OON 38076).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Males can easily be recognized by their palpal dimorphism; the left embolus has a long, straight tip, whereas the right embolus has a short, curved tip (figs. 736–741).

MALE (PBI_OON 38076, figs. 733–741): Total length 1.69. Elevated portion of pars cephalica appears reticulate. Chilum broad, triangular. Anterior ledge on paturon obliquely oriented. Endites with dorsal process long, narrow, widely separated from ventral process. Leg spination: femur I p0-0-1; tibiae: I v4-4-0, II v2-2-0; metatarsi: I v2-2-1p, II v22-2-0. Left embolus with long, straight tip, right embolus with short, curved tip.

FEMALE: Unknown.

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Northern Colombia (Norte de Santander).

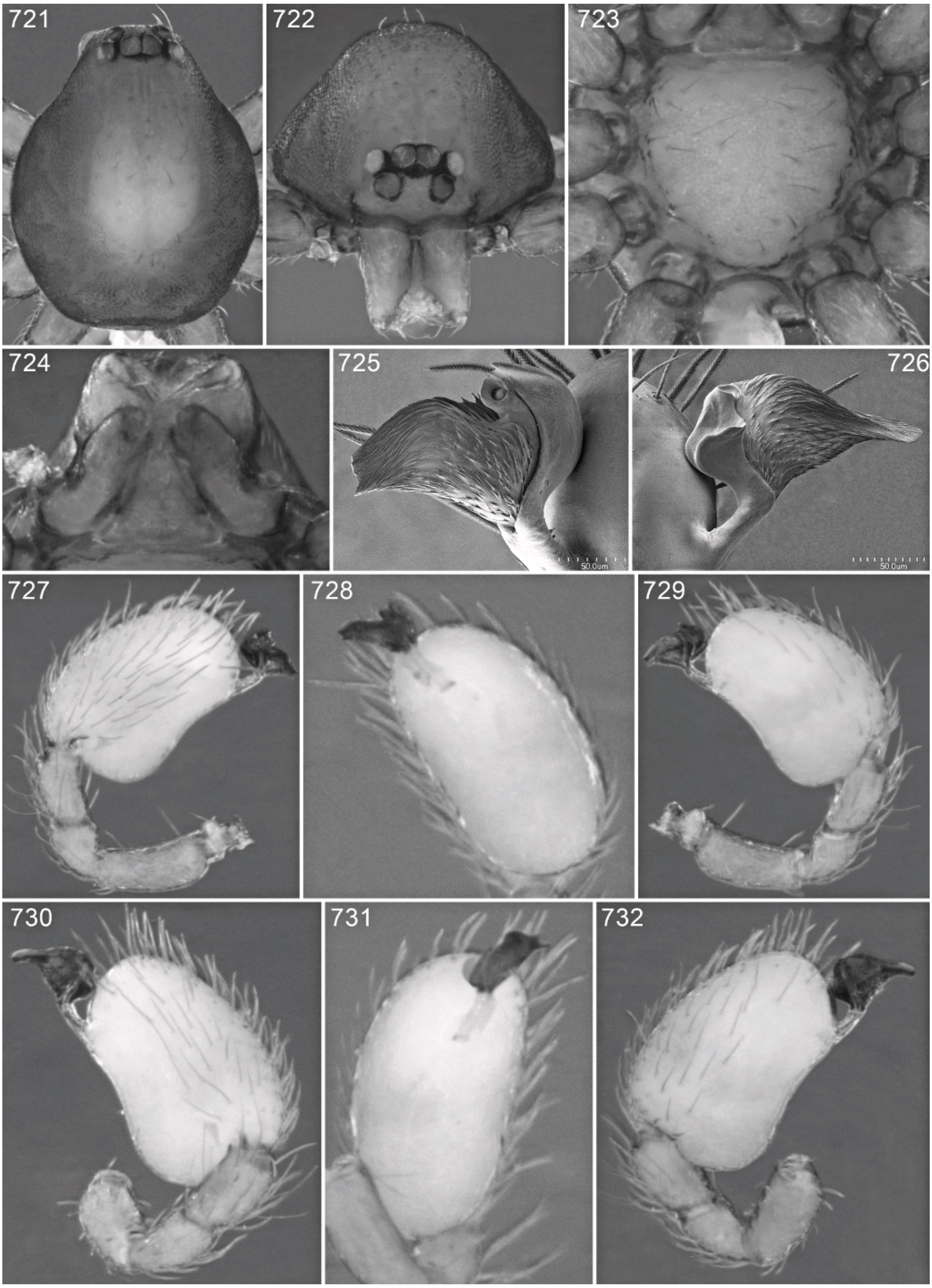
Semidysderina, new genus

TYPE SPECIES: *Semidysderina lagila*, new species.

ETYMOLOGY: The generic name refers to the relationships of the genus with *Dysderina.*

DIAGNOSIS: Members of this genus resemble those of *Scaphidysderina* and *Paradysderina* in lacking a dorsal abdominal scutum in females and a spinneret scutum in both sexes; they differ in having a groove connecting the posterior spiracles (figs. 757, 824). At least four species, known only from the Sierra Nevada de Santa Marta, are remarkable for the retention of a seam between the male palpal cymbium and bulb (figs. 818, 831).

DESCRIPTION: Total length of males 1.2–2.2, of females 1.4–2.6. Coloration typically carapace orange-brown, without pattern; sternum and mouthparts orange, sternum without pattern; abdominal scuta orange, abdominal soft portions white, without pattern; legs yellow, without pattern. **Cephalothorax:** Carapace broadly oval in dorsal view (figs. 742, 782), anteriorly narrowed to between 0.5 and 0.75 times its maximum width, pars cephalica strongly elevated in lateral view (figs. 743, 783), anterolateral corners without extension or projections; pars thoracica with rounded posterolateral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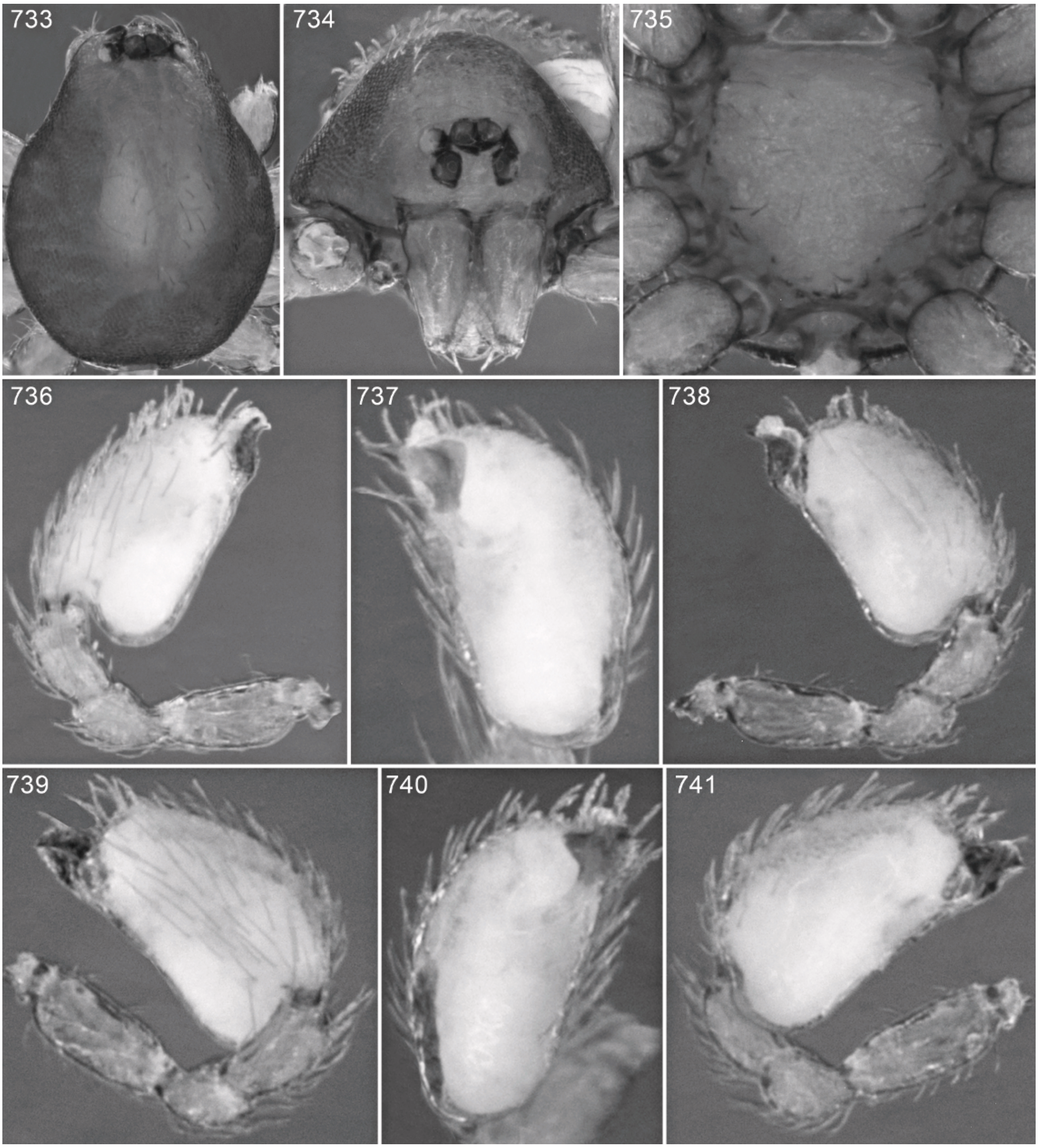
Figs. 721–732. *Paradysderina monstrosa,* new species, male. **721.** Carapace, dorsal view. **722.** Same, anterior view. **723.** Sternum, ventral view. **724.** Mouthparts, ventral view. **725.** Left embolus, retrolateral view. **726.** Right embolus, retrolateral view. **727.** Left palp, prolateral view. **728.** Same, ventral view. **729.** Same, retrolateral view. **730.** Right palp, prolateral view. **731.** Same, ventral view. **732.** Same, retrolateral view.



Figs. 733–741. *Paradysderina chinacota,* new species, male. **733.** Carapace, dorsal view. **734.** Same, anterior view. **735.** Sternum and mouthparts, ventral view. **736.** Left palp, prolateral view. **737.** Same, ventral view. **738.** Same, retrolateral view. **739.** Right palp, prolateral view. **740.** Same, ventral view. **741.** Same, retrolateral view.

corners, without depressions or radiating rows of pits, posterolateral edge without pits, posterior margin not bulging below posterior rim, posterolateral surface without spikes; elevated portion of pars cephalica granulate (but granules sometimes very low, producing reticulate appearance under light microscopy, noted as “appears reticulate” in species descriptions), sides strongly granulate; fovea absent, lateral margin straight, rebordered, without denticles projecting past lateral margin in dorsal view; plumose setae near posterior margin of pars thoracica absent; nonmarginal pars cephalica and pars thoracica setae light, needlelike, scattered; marginal setae light, needlelike. Clypeus margin strongly rebordered, sinuous in front view (figs. 744, 784), vertical in lateral view, high, ALE separated from edge of carapace by their radius or more, median projection absent (except for fused chilum); setae light, needlelike. Chilum undivided, fused to clypeus, with seam. Eyes six, well developed, all subequal, ALE oval, PME squared, PLE oval; posterior eye row slightly recurved from above, slightly procurved from front; ALE separated by their radius to diameter, ALE-PLE separated by less than ALE radius, PME touching throughout most of their length, PLE-PME separated by less than PME radius. Sternum wider than long, uniform, not fused to carapace, surface flat rather than highly crenulated, median concavity and hair tufts absent, with radial furrows between coxae I–II, II–III, III–IV, furrow with rows of small pits, radial furrow opposite coxae III absent, surface smooth or finely rugose, when rugose, microsculpture present everywhere but front (figs. 756, 798), sickle-shaped structures absent, anterior margin with continuous transverse groove, posterior margin extending posteriorly beyond anterior edges of coxae IV as single extension but without posterior hump, anterior corner unmodified, lateral margin with infracoxal grooves and anterior and posterior openings, distance between coxae approximately equal, extensions of precoxal triangles absent, lateral margins with bridges to coxae; setae sparse, dark, needlelike, densest laterally, originating from surface. Chelicerae slightly divergent (fig. 745, 746), anterior face with swelling; promargin usually without teeth, retromargin usually with one tooth; fang without toothlike projections, directed medially, shape normal, without prominent basal process, tip unmodified (fig. 785, 786); setae light, needlelike, densest medially; paturon inner margin with pairs of enlarged setae, distal region unmodified, posterior surface unmodified, anterior surface frequently with modifications in male, promargin with row of flattened setae, inner margin unmodified, laminate groove absent. Labium triangular, not fused to sternum, anterior margin indented at middle, same as sternum in sclerotization, with six or more setae on anterior margin, subdistal portion with unmodified setae (fig. 787). Endites same as sternum in sclerotization, serrula present in single row in females (figs. 788, 789), apparently absent in males; males with wide, flattened ventral process on anterior part (figs. 747, 748), posterior part unmodified. Female palp without claw or spines (figs. 800, 801); patella without prolateral row of ridges; tibia with three trichobothria in diagonal row (fig. 802); tarsus unmodified. **Abdomen:** Ovoid, without long posterior extension, rounded posteriorly, interscutal membrane rows of small sclerotized platelets absent. Book lung covers large, ovoid, without setae, anterolateral edge unmodified; posterior spiracles connected by groove (figs. 757, 804, 805). Pedicel tube medium, ribbed, scutopedicel region unmodified, scutum extending far dorsal of pedicel, plumose hairs absent, matted setae on anterior ventral abdomen in pedicel area absent, cuticular outgrowths near pedicel absent. Dorsal scutum present in males, strongly sclerotized, not fused to epigastric scutum, middle surface smooth, sides smooth, anterior half without projecting denticles; dorsal scutum absent in females. Epigastric scutum strongly sclerotized, surrounding pedicel, not protruding, small lateral sclerites absent, without lateral joints in females. Postepigastric scutum strongly sclerotized, in males long, semicircular, fused to epigastric scutum, in females, short, not fused to epigastric scutum; anterior margin unmodified, with short posteriorly directed lateral apodemes. Spinneret scutum absent; supraanal scutum absent. Abdominal dorsal, epigastric, and postepigastric setae dark, needlelike; frontal epigastric area setae not thickened; dense patch of setae anterior to spinnerets absent; interscutal membrane with setae. Colulus present, tiny, with pair of setae. Anterior lateral spinnerets bisegmented, posterior medians unisegmented, posterior laterals bisegmented (figs. 774, 778); spigots scanned only in *S. lagila*, anterior laterals with one major ampullate gland spigot plus four piriform gland spigots in male (fig. 775), eight in female (fig. 779); posterior medians with one minor ampullate gland spigot plus two aciniform gland spigots in male (fig. 776), 11 in female (fig. 780); posterior laterals with one minor ampullate gland spigot plus three aciniform gland spigots in male (fig. 777), 15 in female (fig. 781). **Legs:** Femur IV not thickened, same size as femora I–III, patella plus tibia I shorter than carapace, tibia I unmodified, tibia IV ventral scopular and specialized hairs on ventral apex absent, metatarsi I, II mesoapical comb absent, metatarsi III, IV weak ventral scopula absent. Leg spines present on femur I (and usually II); anterior tibiae and metatarsi with several pairs of very long spines, legs III, IV without spines (figs. 770–773, 806–808). Tarsi without inferior claw. Superior claws with about five teeth on inner and outer surfaces (figs. 758–765), females with distalmost tooth on outer surfaces reduced in size (figs. 790–797). Trichobothrial base with numerous parallel ridges (fig. 799). Tarsal organ with three sensillae on legs I, II (figs. 766, 767, 809, 810), two on legs III, IV, palp (figs. 755, 768, 769, 803, 811, 812). **Genitalia:** Male epigastric region with sperm pore small, oval or triangular, situated at level of posterior spiracles, rebordered; furrow without Ω-shaped insertions, without setae. Male palp of normal size, not strongly sclerotized, right and left palps symmetrical, proximal segments pale orange; cymbium and bulb yellow, embolus dark, prolateral excavation absent; trochanter minute, unmodified; femur of normal size, two or more times as long as trochanter, without posteriorly rounded lateral dilation, attaching to patella basally; patella shorter than femur, not enlarged, without prolateral row of ridges, setae unmodified; tibia with three trichobothria in diagonal line (fig. 754); cymbium ovoid in dorsal view, fused with bulb but seam often present (fig. 750), not extending beyond distal tip of bulb, plumose setae absent, without stout setae or distal patch of setae; bulb elongated, 1–1.5 times as long as cymbium, stout (figs. 749, 751); embolus with sharply pointed basal projection (figs. 752, 753). Female genitalia with very strong apodemes (fig. 813), atrium with elevated anterior ridge and rebordered posterior margin.

DISTRIBUTION: Known only from northern and central Colombia.

KEY TO SPECIES

1. Sternum rugose (as in figs. 756, 798, 816). . . 2
– Sternum smooth, shiny (fig. 829) . . . *kochalkai*
2. Male palpal bulb and embolus narrow (figs. 864, 866); female genitalic atrium slit-like (figs. 871, 872) . . . . *sturmi*
– Male palpal bulb and embolus wide (as in fig. 819); female genitalic atrium larger (as in figs. 825, 859) 3
3. Males (those of *marta* unknown) 4
– Females 6
4. Embolus relatively long (figs. 877, 879). . . *mulleri*
– Embolus relatively short (figs. 819, 845) . . . 5
5. Embolus wider distally than basally (fig. 819) . . . . *lagila*
– Embolus as wide basally as distally (fig. 845) . . . . *donachui*
6. Genitalic atrium relatively long, with W-shaped anterior margin (figs. 884, 885) . . . . . *mulleri*
– Genitalic atrium relatively short or without W-shaped anterior margin (figs. 824, 850, 858) 7
7. Genitalic atrium triangular (fig. 858) . . . *marta*
– Genitalic atrium ovoid (figs. 824, 850). . . 8
8. Anterior genitalic process relatively long (fig. 825). *lagila*
– Anterior genitalic process relatively short (fig. 851). . . . . *donachui*

Semidysderina lagila, new species

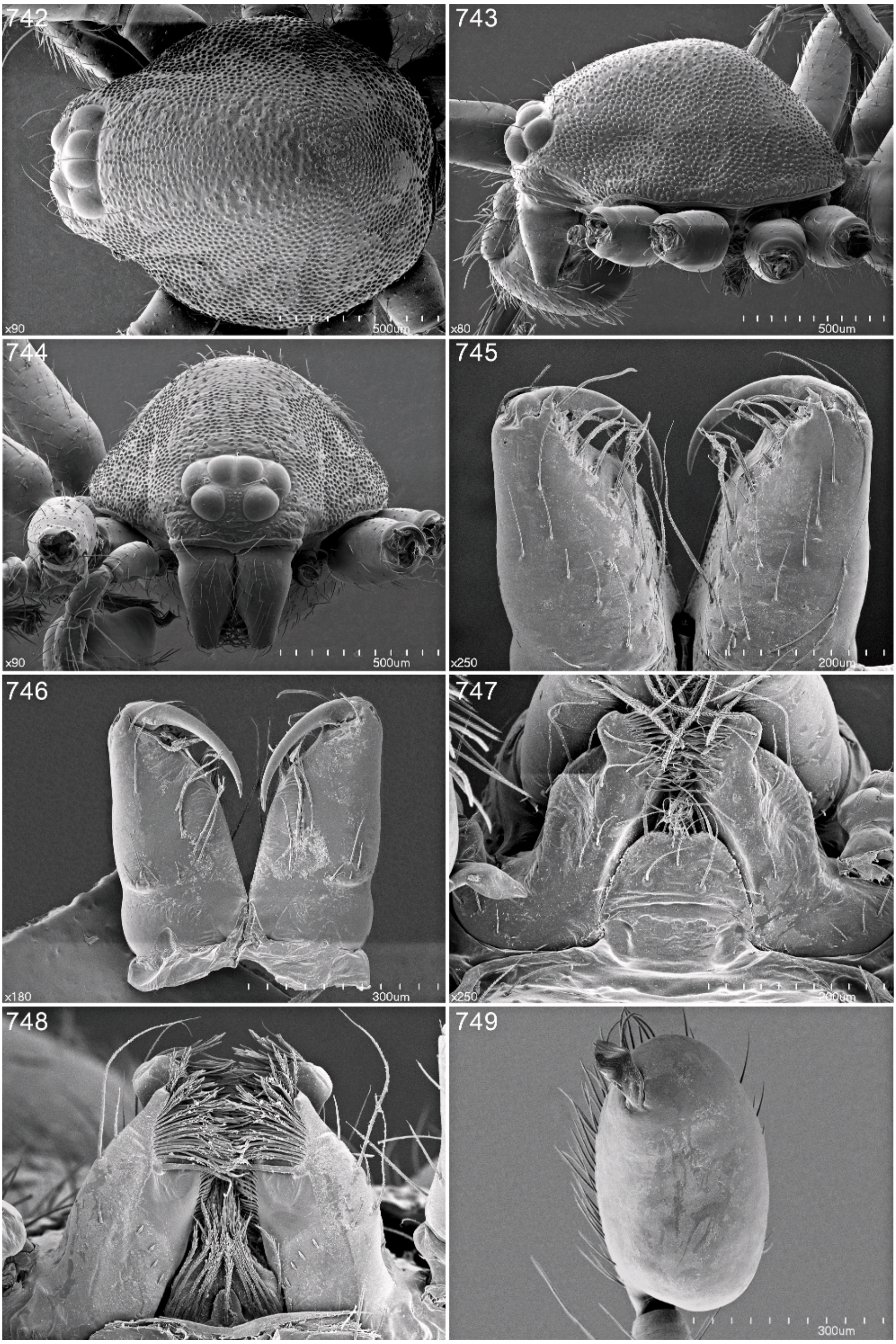
Figures 742–826

TYPES: Male holotype and female allotype taken in pitfall traps at an elevation of 5050 ft at Cerro Lagila, Sierra Nevada de Santa Marta, Magdalena, Colombia (Apr. 15–30, 1975; J. Kochalka), deposited in AMNH (PBI_OON 37104).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: In sternal morphology this species resembles *S. donachui* rather than *S. kochalkai*, but the male embolus is more diamond shaped in lateral view (figs. 752, 753, 819) and the anterior margin of the female genital atrium is straight (figs. 824–826).

MALE (PBI_OON 37104, figs. 742–777, 814–820): Total length 2.07. Elevated portion of pars cephalica granulate. Chilum small, triangular. Sternum surface finely reticulate. Anterior ledge of paturon with slight tubercle on inner margin. Endites with wide ventral process, tip of process flattened, directed laterally. Leg spination: femora: I


742
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744
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x250
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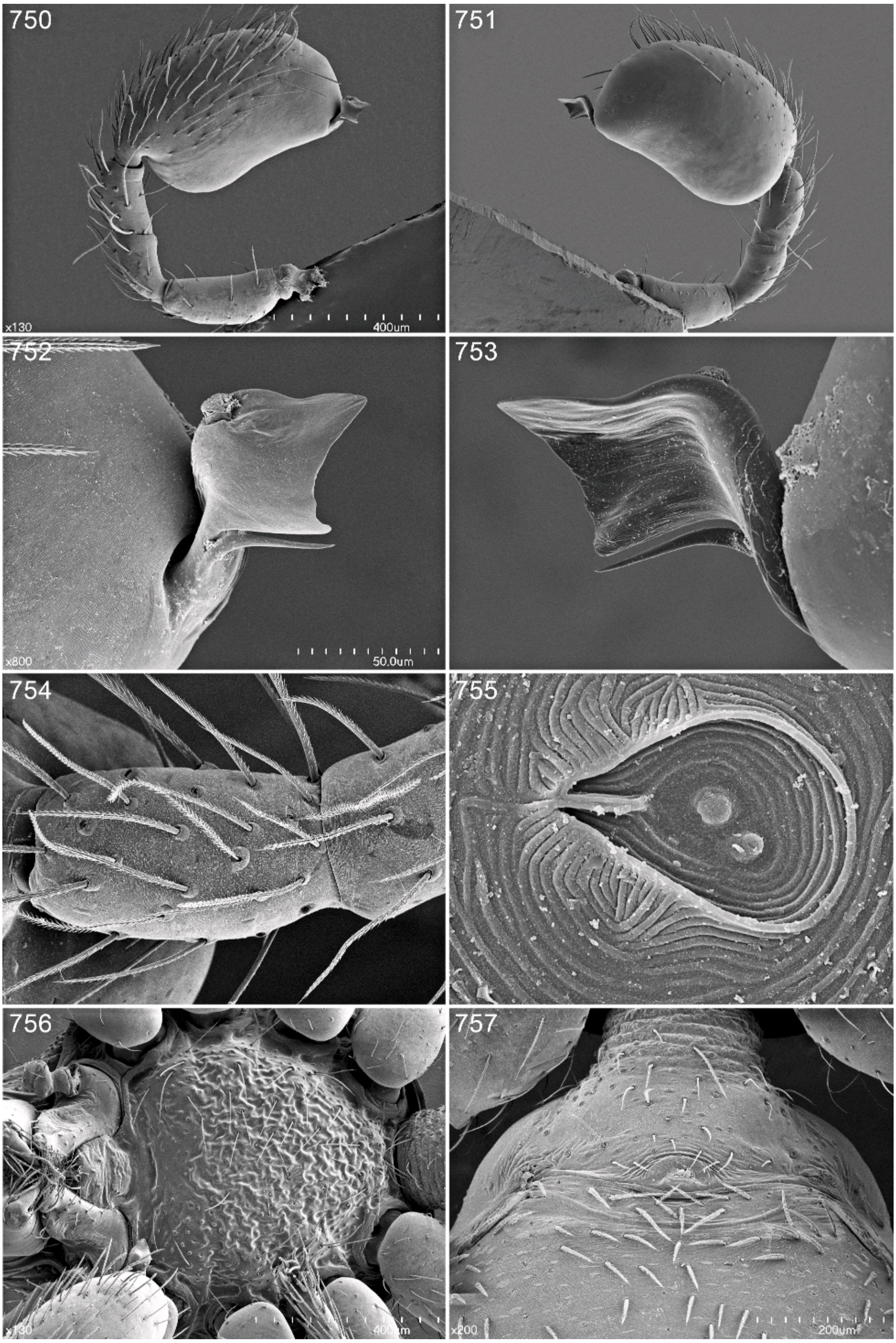
748
749
300um

Figs. 742–749. *Semidysderina lagila*, new species, male. **742.** Carapace, dorsal view. **743.** Same, lateral view. **744.** Same, anterior view. **745.** Chelicerae, anterior view. **746.** Same, posterior view. **747.** Mouthparts, ventral view. **748.** Labrum and endites, dorsal view. **749.** Left palp, ventral view.


750
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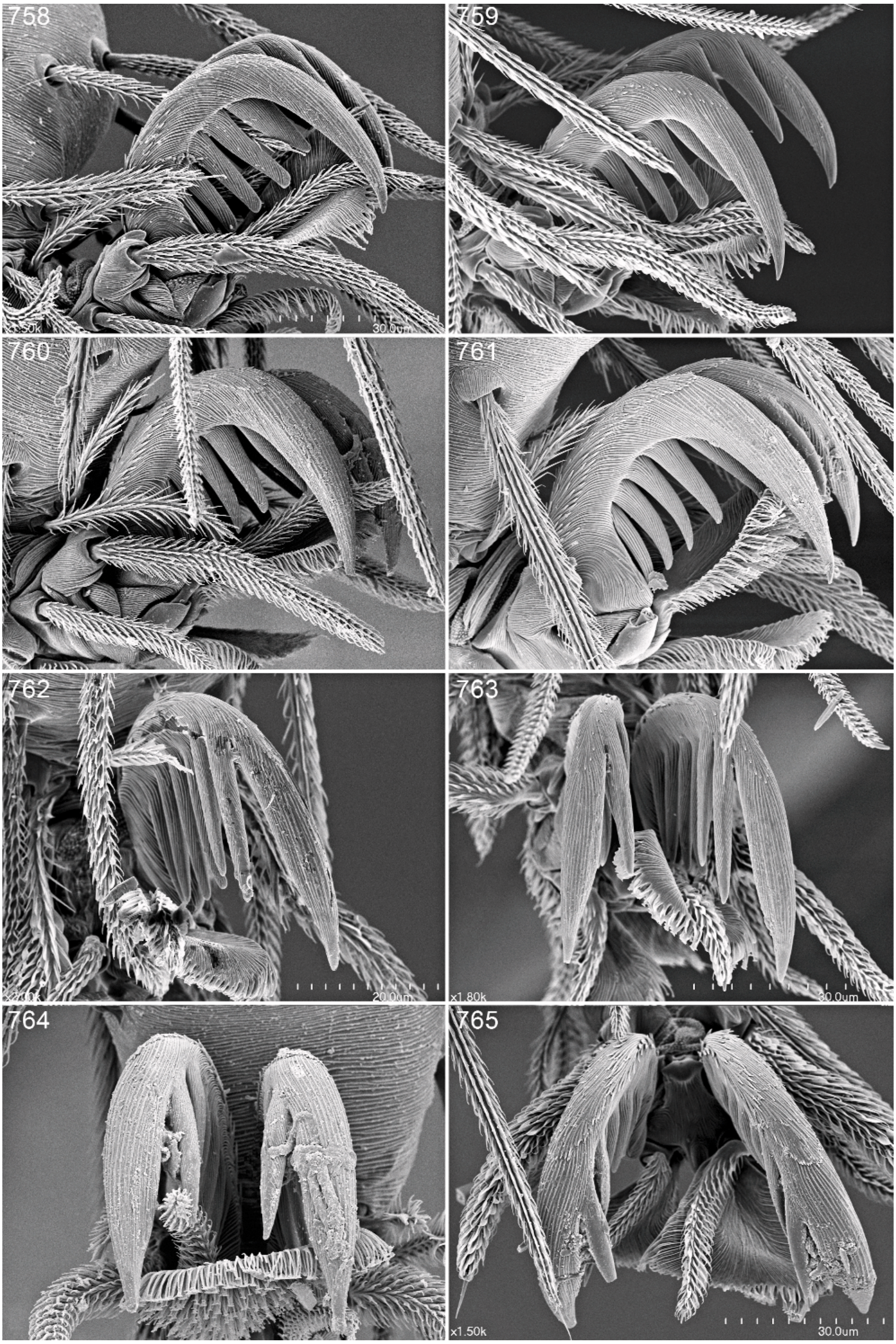
Figs. 750–757. *Semidysderina lagila*, new species, male. **750.** Left palp, prolateral view. **751.** Same, retrolateral view. **752.** Left embolus, prolateral view. **753.** Same, retrolateral view. **754.** Palpal tibia, dorsal view. **755.** Tarsal organ, palp, dorsal view. **756.** Sternum and mouthparts, ventral view. **757.** Anterior portion of abdomen, ventral view.


758
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762
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763
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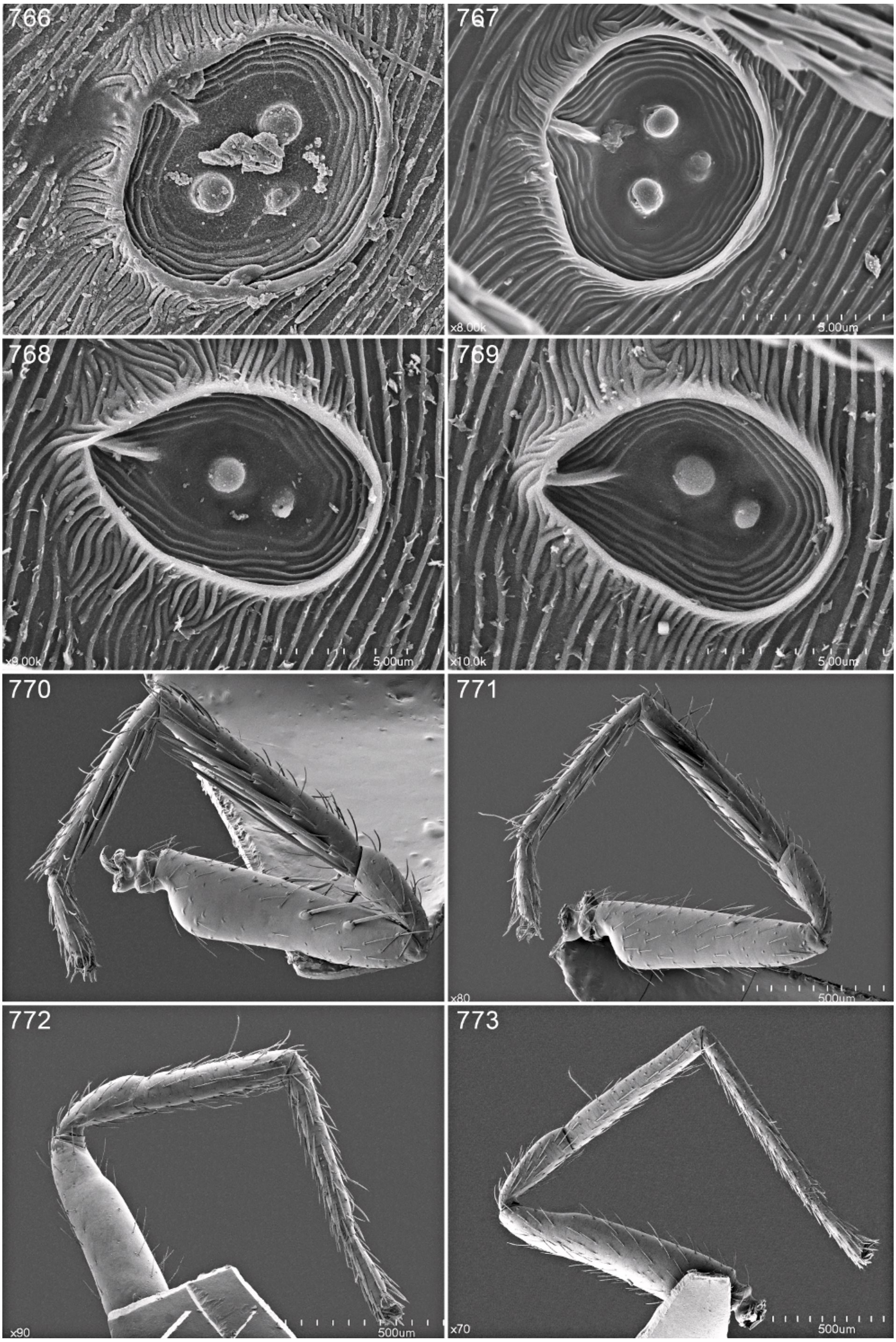
Figs 758–765. *Semidysderina lagila*, new species, male. **758.** Claws of leg I, lateral view. **759.** Same, leg II. **760.** Same, leg III. **761.** Same, leg IV. **762.** Claws of leg I, apical view. **763.** Same, leg II. **764.** Same, leg III. **765.** Same, leg IV.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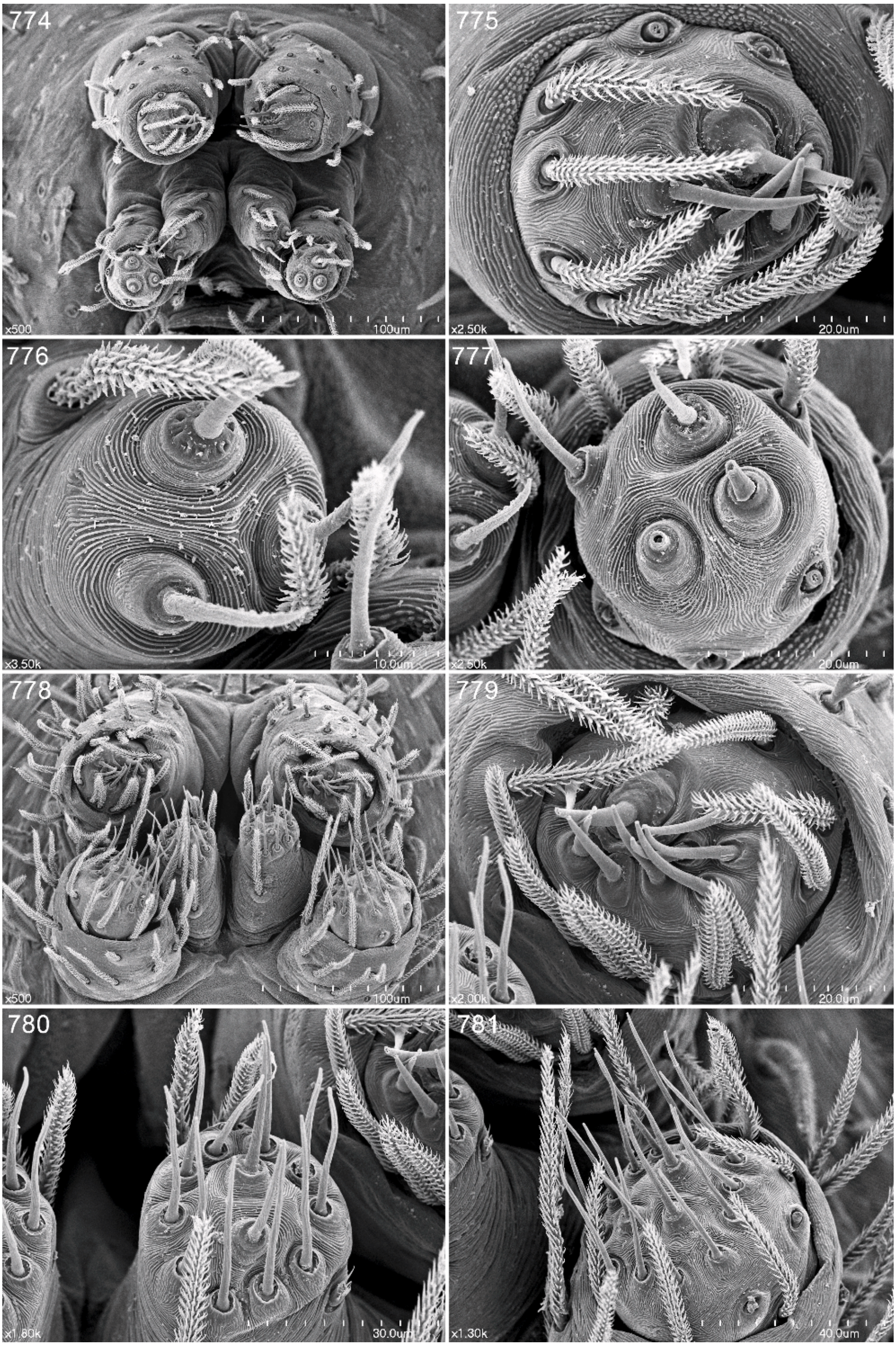
500um

Figs. 766–773. *Semidysderina lagila*, new species, male. **766.** Tarsal organ from leg I, dorsal view. **767.** Same, leg II. **768.** Same, leg III. **769.** Same, leg IV. **770.** Leg I, lateral view. **771.** Same, leg II. **772.** Same, leg III. **773.** Same, leg IV.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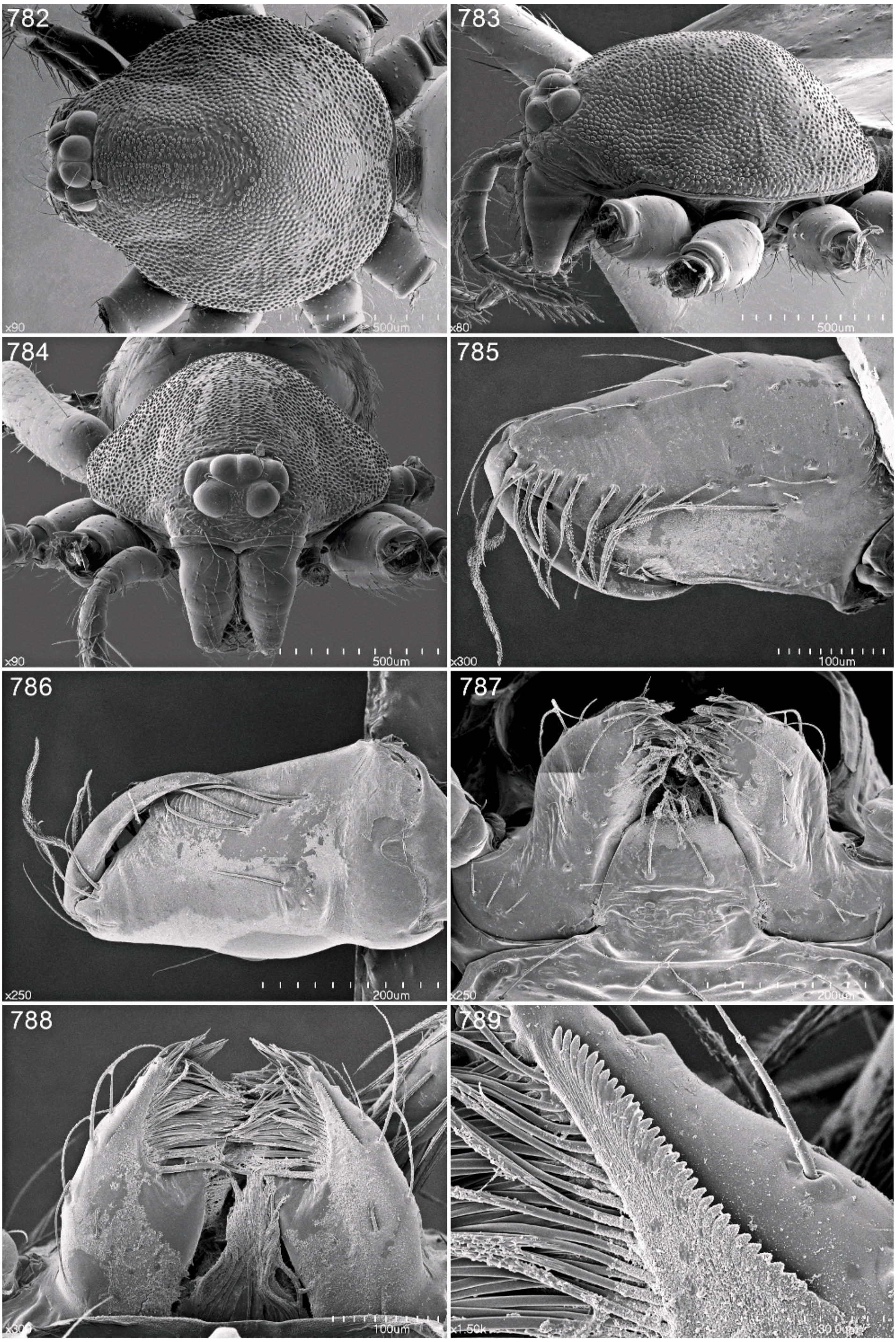
x2.00k
20.0um
780
x1.80k
30.0um
781
x1.30k
40.0um

Figs. 774–781. *Semidysderina lagila*, new species, male (774–777) and female (778–781). **774, 778.** Spinnerets, apical view. **775, 779.** Anterior lateral spinneret, apical view. **776, 780.** Posterior median spinneret, apical view. **777, 781.** Posterior lateral spinneret, apical view.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x1.50k
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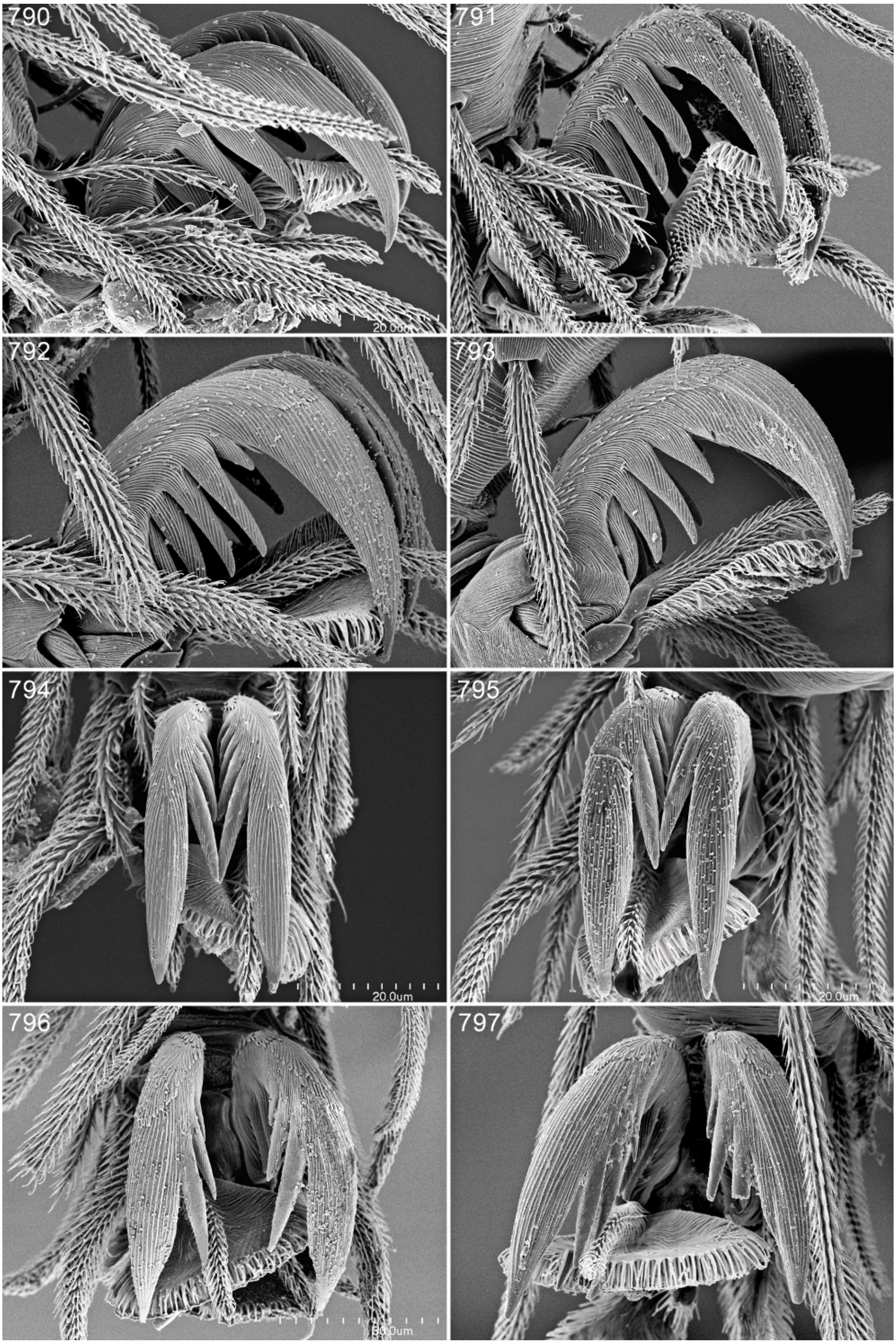
Figs. 782–789. *Semidysderina lagila*, new species, female. **782.** Carapace, dorsal view. **783.** Same, lateral view. **784.** Same, anterior view. **785.** Chelicerae, anterior view. **786.** Same, posterior view. **787.** Mouthparts, ventral view. **788.** Labrum and endites, dorsal view. **789.** Serrula, dorsal view.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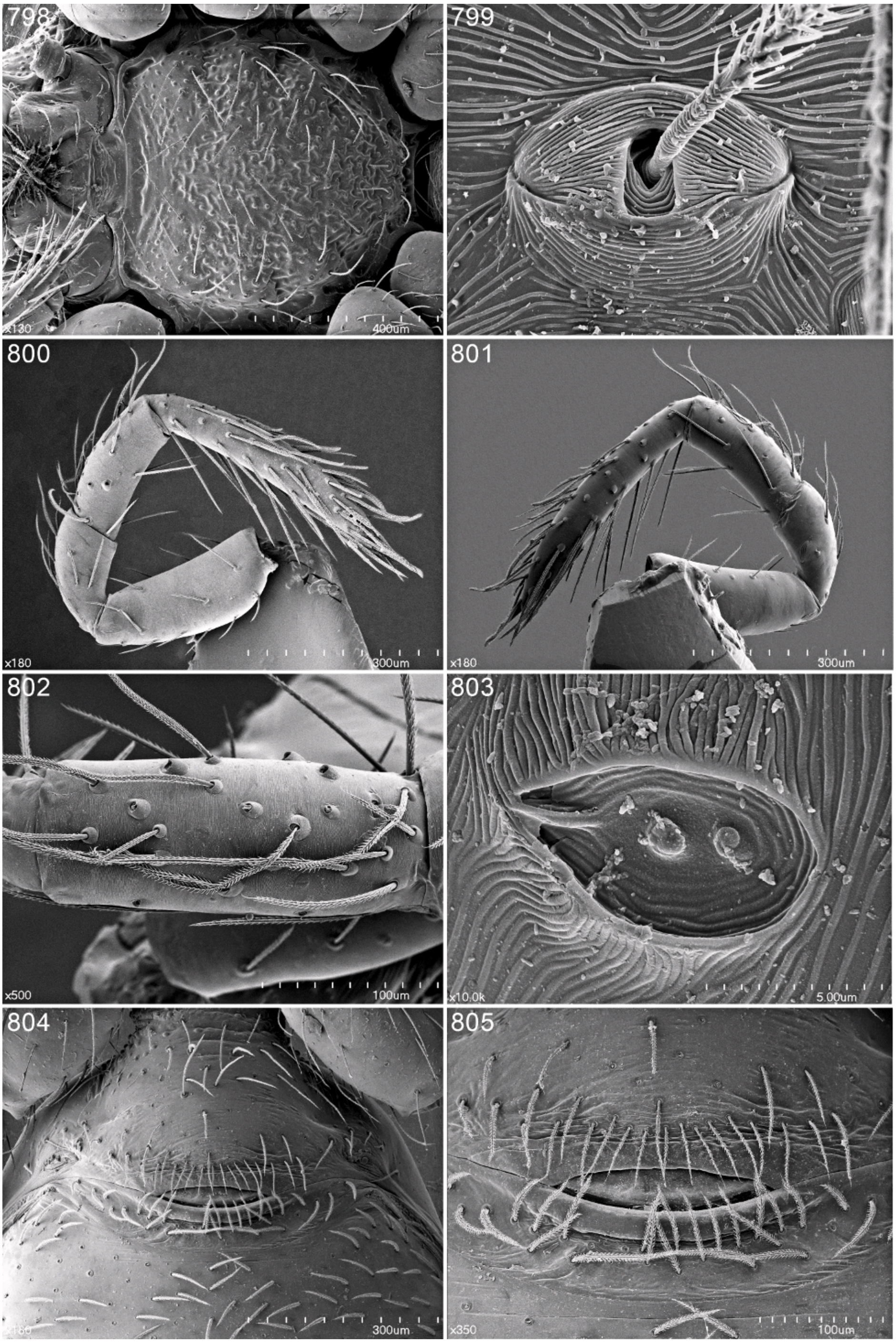
Figs. 790–797. *Semidysderina lagila*, new species, female. **790.** Claws of leg I, lateral view. **791.** Same, leg II. **792.** Same, leg III. **793.** Same, leg IV. **794.** Claws of leg I, apical view. **795.** Same, leg II. **796.** Same, leg III. **797.** Same, leg IV.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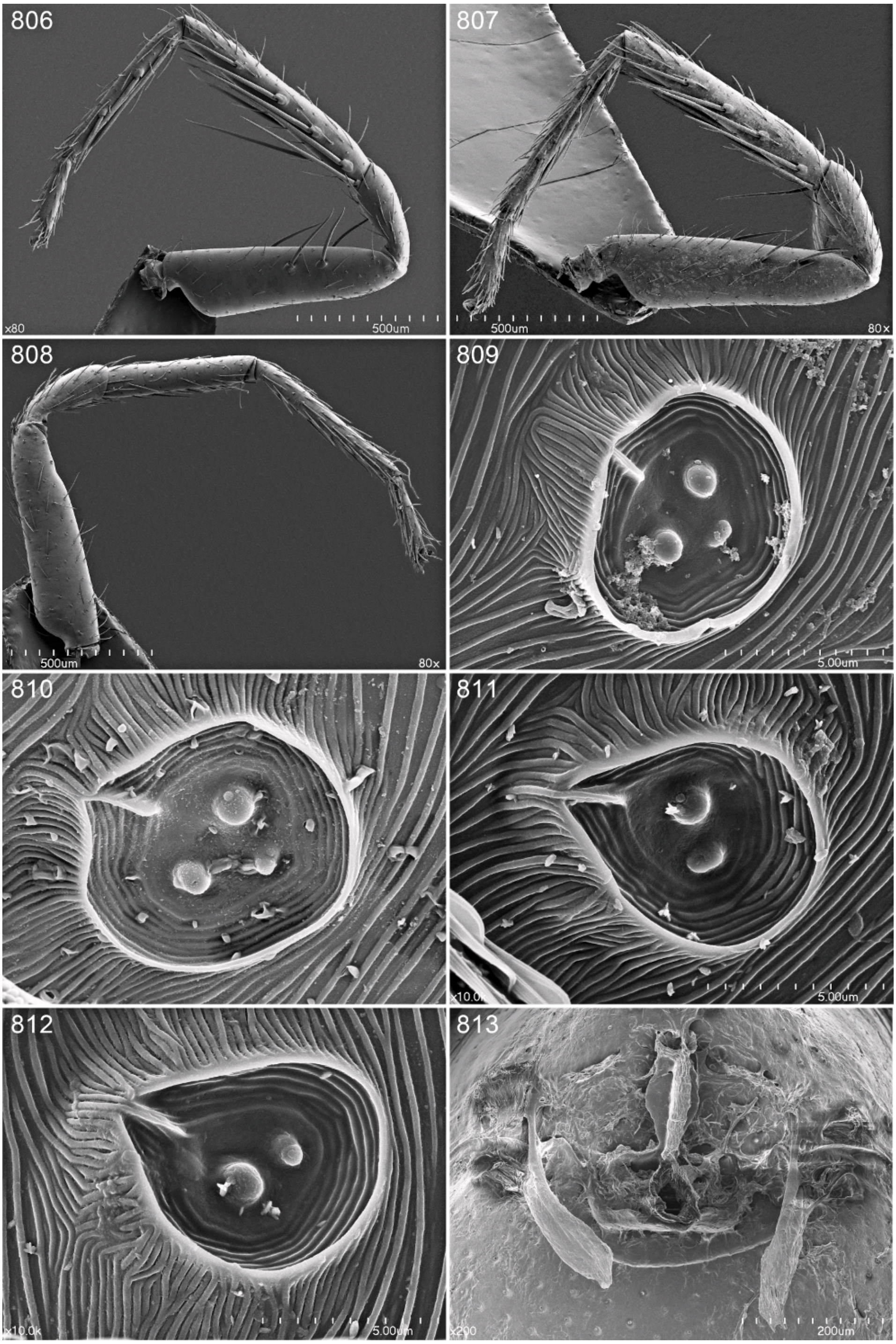
Figs. 798–805. *Semidysderina lagila*, new species, female. **798.** Sternum and mouthparts, ventral view. **799.** Trichobothrial base from metatarsus II, dorsal view. **800.** Palp, prolateral view. **801.** Same, retrolateral view. **802.** Palpal tibia, dorsal view. **803.** Tarsal organ, palp, dorsal view. **804.** Anterior portion of abdomen, ventral view. **805.** Genitalia, ventral view.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x200
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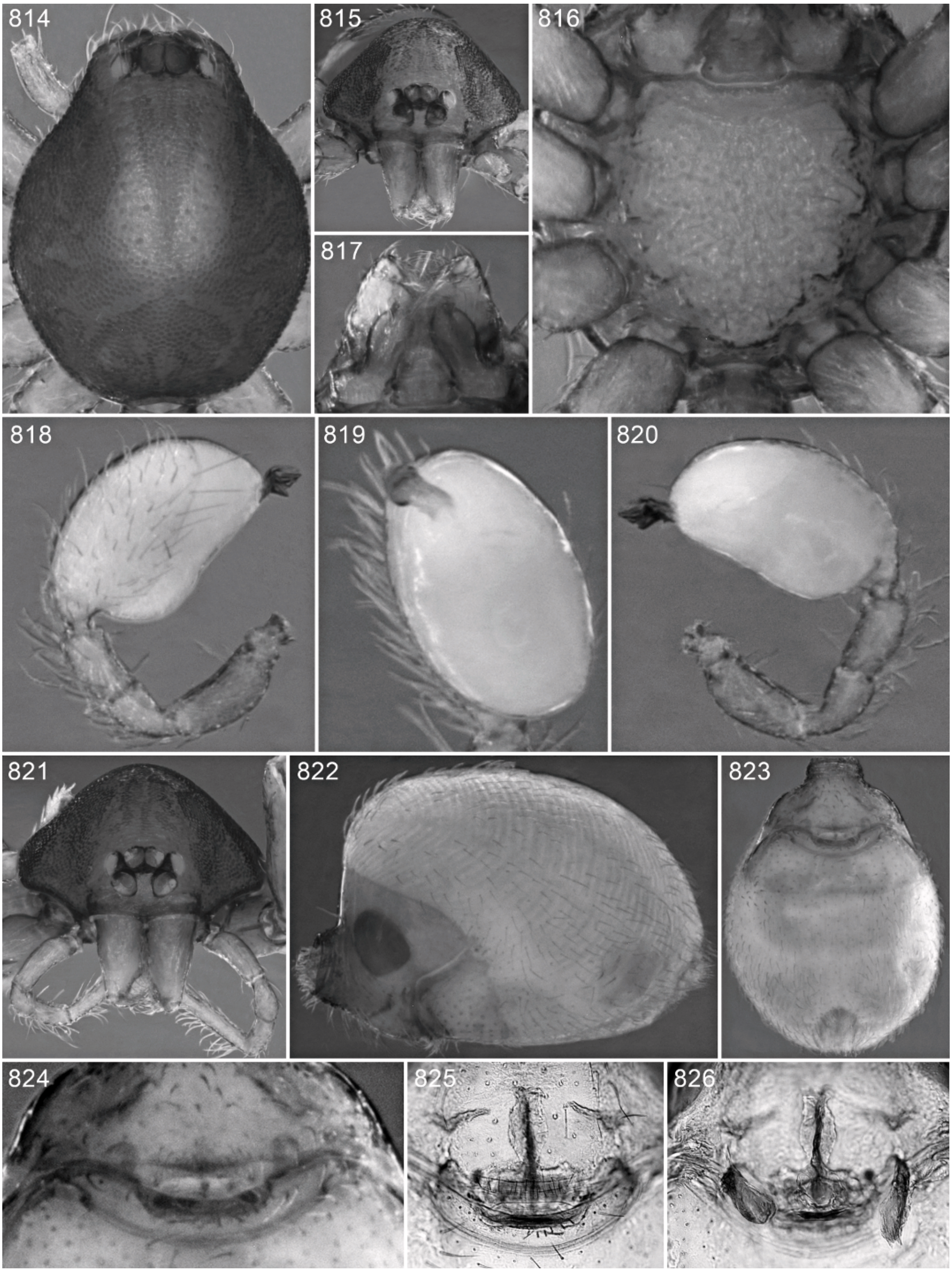
Figs. 806–813. *Semidysderina lagila*, new species, female. **806.** Leg I, lateral view. **807.** Same, leg II. **808.** Same, leg III. **809.** Tarsal organ from leg I, dorsal view. **810.** Same, leg II. **811.** Same, leg III. **812.** Same, leg IV. **813.** Genitalia, dorsal view.



Figs. 814–826. *Semidysderina lagila*, new species, male (814–820) and female (821–826). **814.** Carapace, dorsal view. **815, 821.** Same, anterior view. **816.** Sternum, ventral view. **817.** Mouthparts, ventral view. **818.** Left palp, prolateral view. **819.** Same, ventral view. **820.** Same, retrolateral view. **822.** Abdomen, lateral view. **823.** Same, ventral view. **824, 825.** Epigastric region, ventral view. **826.** Same, dorsal view.

p0-0-2, r0-1-1, II p0-0-2, r0-1-0; tibiae I, II v4-4-2; metatarsi: I v2-2-2, II v2-2-0. Embolus diamond shaped in retrolateral view; cymbium fused with bulb but with clearly defined seam between, seam more obvious on prolateral side than on retrolateral side.

FEMALE (PBI_OON 37099, figs. 778–813, 821–826): Total length 2.58. Postepigastric scutum covering about one-third of abdomen length. Leg spination: femora I, II p0-0-2, r0-1-1; tibiae I, II v4-4-2; metatarsi: I v2-2-2, II v2-2-1p. Atrium short, wide; anterior genitalic process long, narrow.

OTHER MATERIAL EXAMINED: **Colombia:** *Magdalena:* Cerro Kennedy, northern Sierra Nevada de Santa Marta, Aug. 30, 1985, moss and litter, elev. 2600 m (H.-G. Müller, MHNG PBI_OON 15688), 1♂; El Campano, northern Sierra Nevada de Santa Marta, Apr. 20, 1986, leaf litter, elev. 1000 m (H.-G. Müller, MHNG PBI_OON 15610), 4♂; San Lorenzo, northern Sierra Nevada de Santa Marta, June 20, 1985, litter and moss, elev. 2200 m (H.-G. Müller, MHNG PBI_OON 880), 9♂; near San Lorenzo, northern Sierra Nevada de Santa Marta, Aug. 18–25, 1985, bamboo forest with litter and sphagnum, elev. 2250 m (H.-G. Müller, MHNG PBI_OON 878, 15803), 2♂, 1♀, Aug. 25, 1985, moss, elev. 1900 m (H.-G. Müller, MHNG PBI_OON 879), 1♂; San Pedro, Sierra Nevada de Santa Marta, May 19, 1975, epiphytic bromeliads and/or leaf litter, elev. 3150 ft (J. Kochalka, AMNH PBI_OON 37105), 4♂, 2♀; between San Pedro and San Javier, Sierra Nevada de Santa Marta, Mar. 29, 1975, sifted leaf litter, elev. 5,130 ft (J. Kochalka, AMNH PBI_OON 37099), 5♂, 6♀; near San Pedro de la Sierra, northwestern Sierra Nevada de Santa Marta, Apr. 12, 1986, litter, elev. 1000 m (H.-G. Müller, MHNG PBI_OON 15478), 3♂, 3♀.

DISTRIBUTION: Known only from the Sierra Nevada de Santa Marta in northern Colombia, at elevations from 1000 to 2600 m.

Semidysderina kochalkai, new species

Figures 827–839

TYPES: Male holotype and female allotype taken at an elevation of 15,700 ft at a lake at Río Tucurinca, Sierra Nevada de Santa Marta, Magdalena, Colombia (Mar. 16, 1975; J. Kochalka), deposited in AMNH (PBI_OON 37100).

ETYMOLOGY: The specific name is a patronym in honor of John Kochalka, pioneering collector of the spiders of the Sierra Nevada de Santa Marta.

DIAGNOSIS: Both sexes can easily be recognized by their smooth, shiny sternum with few reticulations (fig. 829). The genitalia are very similar to those of *S. donachui*, but males have shorter dorsal and ventral abdominal scuta and females have much longer genitalic apodemes (figs. 838, 839).

MALE (PBI_OON 37100, figs. 827–833): Total length 2.16. Elevated portion of pars cephalica appears reticulate. Chilum small, triangular. Sternum surface smooth. Anterior ledge of paturon with small tubercle on inner margin. Endites with ventral process wide, distal portion flattened, sinuous, with anteromedially directed tip. Leg spination: femora: I p0-0-2, r0-1-0, II p0-0-2; tibiae I, II v4-4-1p; metatarsi: I v2-2-1p, II v2-2-0. Embolus with ventral projection at about half its length; cymbium fused with bulb but with clearly defined seam between, seam more visible on prolateral side than on retrolateral side.

FEMALE (PBI_OON 37100, figs. 834–839): Total length 2.40. Postepigastric scutum only around epigastric furrow. Leg spination: femora: I p0-0-2, r0-1-1, II p0-0-2, r0-1-0; tibiae: I v4-4-22, II v4-4-1p; metatarsi I, II v2-2-1p. Posterior margin or atrium sinuous; anterior genitalic process slightly expanded at base; apodemes long, thick.

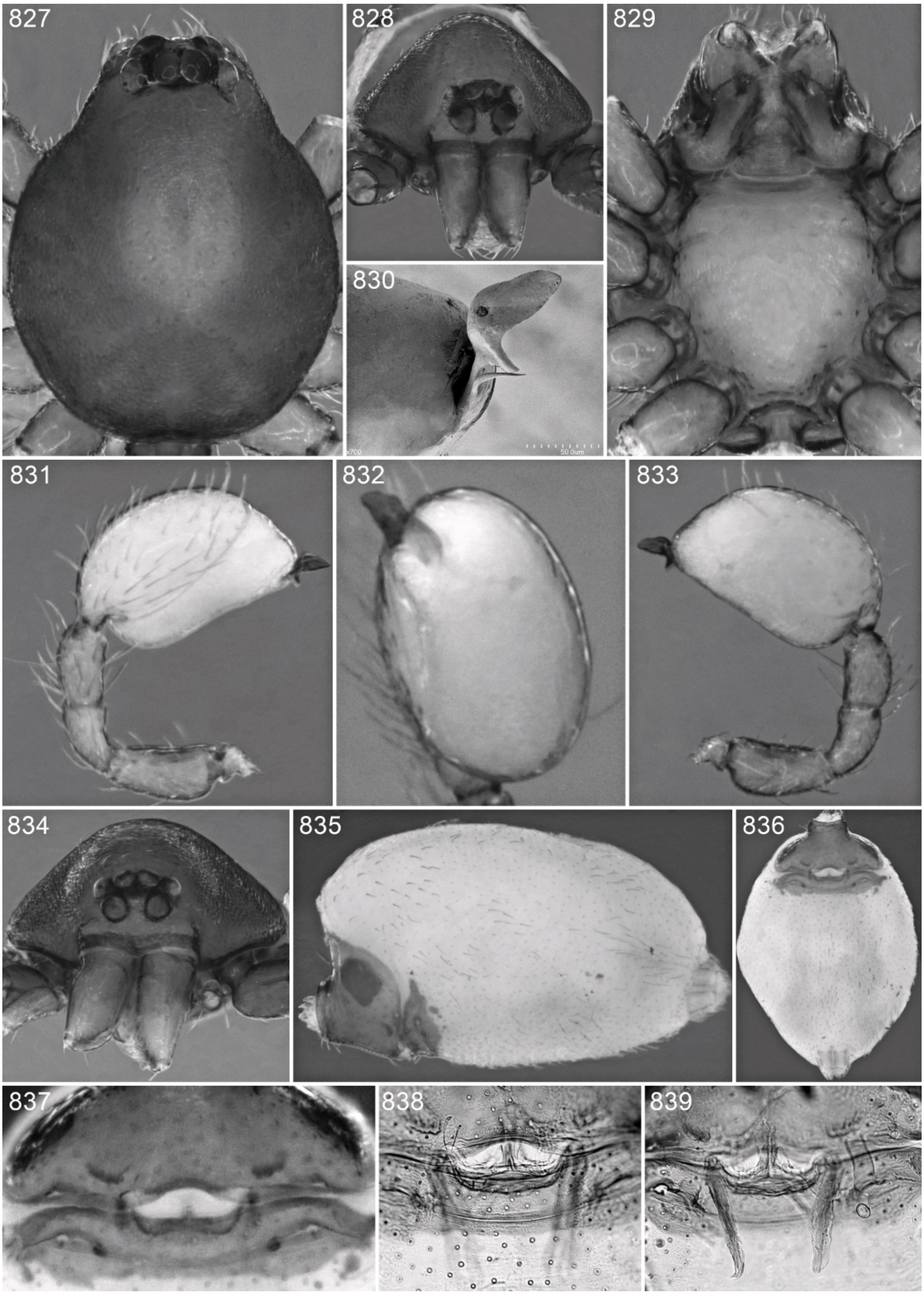
OTHER MATERIAL EXAMINED: **Colombia:** *Magdalena:* Loma Cebolleta, Sierra Nevada de Santa Marta, May 9, 1975, terrestrial bromeliads, elev. 11,500 ft (J. Kochalka, AMNH PBI_OON 37103), 2♂.

DISTRIBUTION: Known only from the Sierra Nevada de Santa Marta in northern Colombia.

Semidysderina donachui, new species

Figures 840–852

TYPE: Male holotype taken under a rock at an elevation of 14,200 ft at Río Donachui, Sierra Nevada de Santa Marta, Cesar,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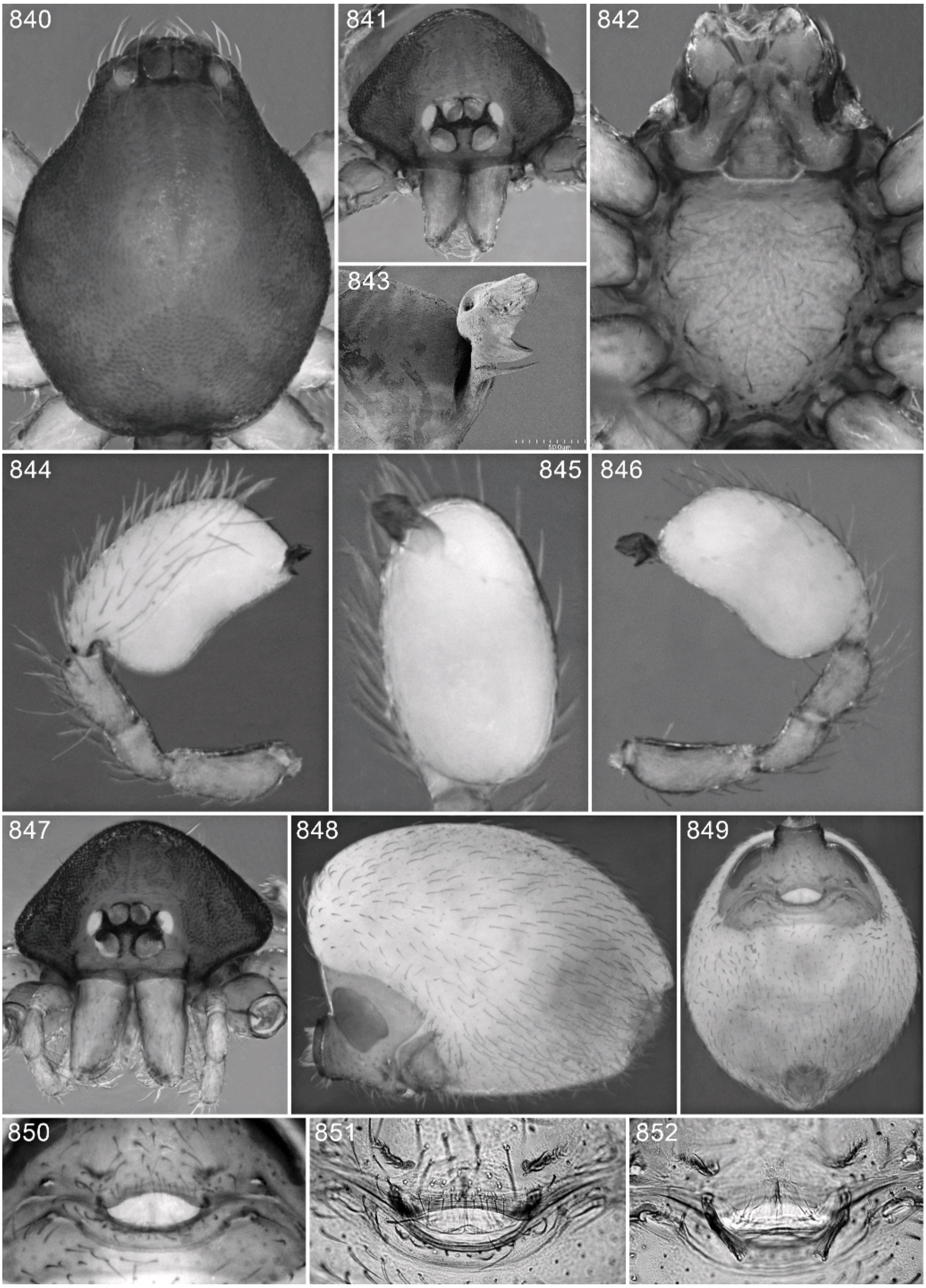
Figs. 827–839. *Semidysderina kochalkai*, new species, male (827–833) and female (834–839). **827.** Carapace, dorsal view. **828, 834.** Same, anterior view. **829.** Sternum and mouthparts, ventral view. **830.** Left embolus, prolateral view. **831.** Left palp, prolateral view. **832.** Same, ventral view. **833.** Same, retrolateral view. **835.** Abdomen, lateral view. **836.** Same, ventral view. **837, 838.** Epigastric region, ventral view. **839.** Same, dorsal view.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Figs. 840–852. *Semidysderina donachui*, new species, male (840–846) and female (847–852). **840.** Carapace, dorsal view. **841, 847.** Same, anterior view. **842.** Sternum and mouthparts, ventral view. **843.** Left embolus, prolateral view. **844.** Left palp, prolateral view. **845.** Same, ventral view. **846.** Same, retrolateral view. **848.** Abdomen, lateral view. **849.** Same, ventral view. **850, 851.** Epigastric region, ventral view. **852.** Same, dorsal view.

Colombia Jan. 6, 1973; J. Kochalka), deposited in AMNH (PBI_OON 37102).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: The genitalia closely resemble those of *S. kochalkai*; males have a relatively short, wide embolus with the ventrally directed hook on its prolateral edge (figs. 843–846) less abruptly narrowed; females have an arched anterior margin on the genitalic atrium (figs. 850–852) and a similarly arched posterior margin. Both sexes have a reticulate, rather than smooth, sternal surface (see above).

MALE (PBI_OON 37102, figs. 840–846): Total length 2.10. Elevated portion of pars cephalica granulate. Chilum small, triangular. Sternum surface finely reticulate. Anterior ledge of paturon with small tubercle on inner margin. Endites with wide ventral process flattened distally, tip directed laterally. Leg spination: femora: I p0-0-2, r0-1-1, II p0-0-2; tibiae: I v4-4-2, II v4-4-1p; metatarsi I, II v2-2-1p. Embolus relatively short, wide, with ventrally directed hook on prolateral edge.

FEMALE (PBI_OON 678, figs. 847–852): Total length 2.49. Postepigastric scutum only around epigastric furrow. Leg spination: femora I, II p0-0-2, r0-1-1; tibiae I, II v4-4-2; metatarsi: I v2-2-2, II v2-2-1p. Atrium ovoid; anterior genitalic process small, needlelike, base poorly sclerorized; apodemes distally convergent.

OTHER MATERIAL EXAMINED: **Colombia:** *Cesar:* Río Donachui, Sierra Nevada de Santa Marta, Jan. 19, 1974, elev. 10,000 ft (J. Kochalka, AMNH PBI_OON 37101), 1♀. *Magdalena:* La Estación, Parque Nacional Natural Sierra Nevada de Santa Marta, 10°48′N, 73°39′W, July 15–17, 2000, Winkler, elev. 2200 m (J. Cantillo, IAVH 108114, PBI_OON 640), 1♀; San Lorenzo, Parque Nacional Natural Sierra Nevada de Santa Marta, 10°48′N, 73°39′W, July 15–17, 2000, Winkler, elev. 2200 m (J. Cantillo, IAVH 108122, PBI_OON 639), 1♂; San Lorenzo, northern Sierra Nevada de Santa Marta, June 9, 1985, litter, elev. 2000 m (H.-G. Müller, MHNG PBI_OON 881), 2♂; Aug. 24, 1985, litter and moss, elev. 2200 m (H.-G. Müller, MHNG PBI_OON 15800), 1♂; near San Lorenzo, northern Sierra Nevada de Santa Marta, Aug. 18–24, 1985, thorn forest with moist litter, elev. 2200 m (H.-G. Müller, MHNG PBI_OON 15467, 15800), 1♂, 3♀; between San Pedro and San Javier, Sierra Nevada de Santa Marta, Mar. 29, 1975, elev. 5,130 ft (J. Kochalka, AMNH PBI_OON 37098), 1♀; Sierra Nevada de Santa Marta, June 4, 2001, pitfall, elev. 2480 m (P. Sanchez, ICN 4106, PBI_OON 678), 2♂, 2♀.

DISTRIBUTION: Known only from the Sierra Nevada de Santa Marta in northern Colombia.

Semidysderina marta, new species
Figures 853–860

TYPE: Female holotype taken in pitfall trap at an elevation of 5050 ft at Cerro Lagila, Sierra Nevada de Santa Marta, Magdalena, Colombia (Apr. 15–30, 1975; J. Kochalka), deposited in AMNH (PBI_OON 37107).

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

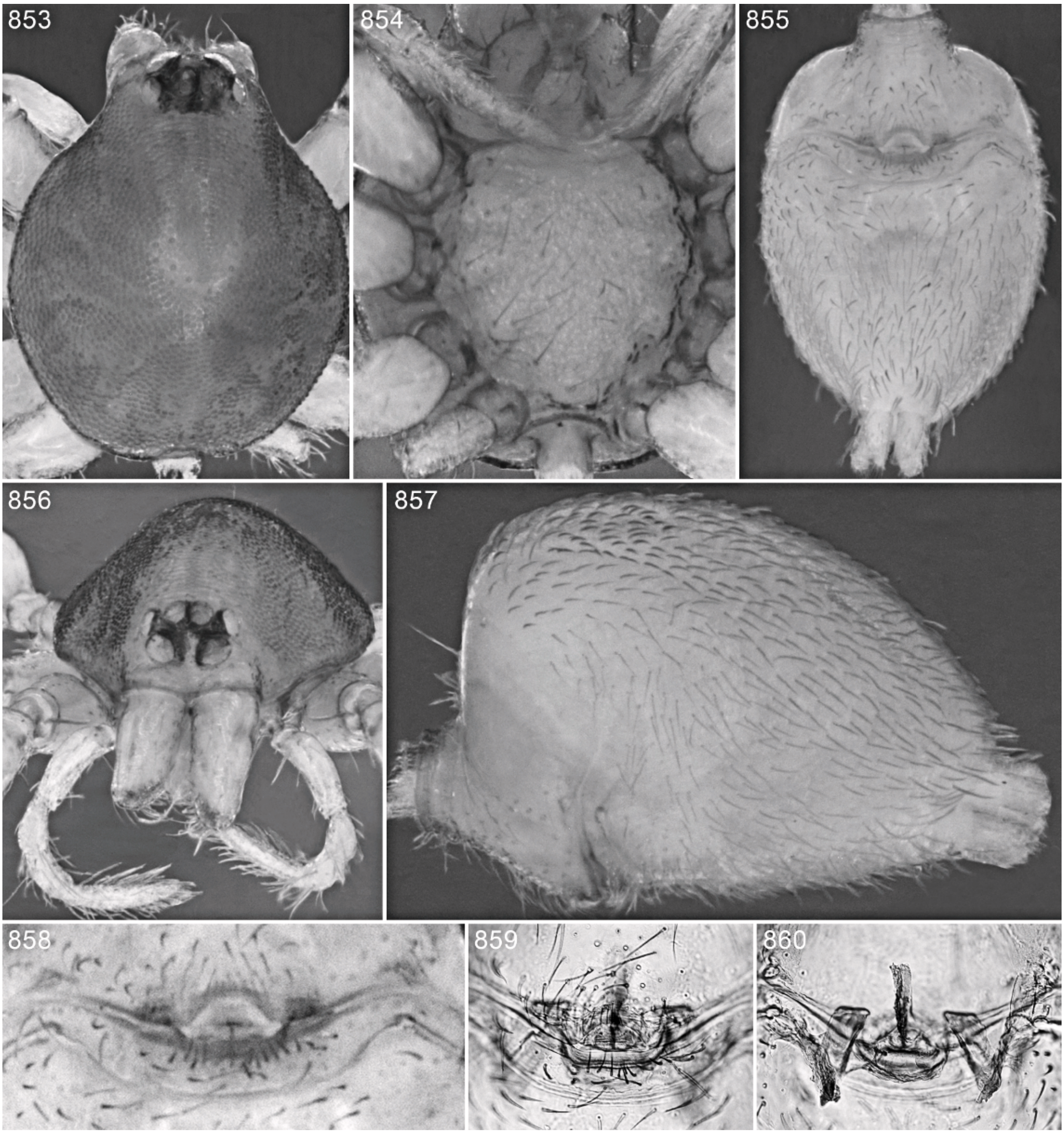
DIAGNOSIS: Females have the atrium largely filled by the triangular base of the anterior genitalic process (figs. 858–860).

MALE: Unknown.

FEMALE (PBI_OON 37107, figs. 853–860): Total length 1.91. Elevated portion of pars cephalica granulate. Chilum small, triangular. Sternum surface finely reticulate. Postepigastric scutum only around epigastric furrow. Leg spination: femora I, II p0-0-2, r0-1-1; tibiae: I v4-4-2, II v4-4-0; metatarsi: I v2-2-2, II v2-2-1p. Both anterior and posterior margins of atrium rebordered; atrium triangular, containing wide triangular sclerotization; anterior genitalic process strongly sclerotized as base; apodemes oriented obliquely.

OTHER MATERIAL EXAMINED: **Colombia:** *Magdalena:* San Lorenzo, northern Sierra Nevada de Santa Marta, June 20, 1985, litter and moss, elev. 2200 m (H.-G. Müller, MHNG PBI_OON 883), 2♀; near San Lorenzo, northern Sierra Nevada de Santa Marta, Aug. 22, 1985, bamboo forest with litter and sphagnum, elev. 2250 m (H.-G. Müller, MHNG PBI_OON 882), 3♀.

DISTRIBUTION: Known only from the Sierra Nevada de Santa Marta in northern Colombia.



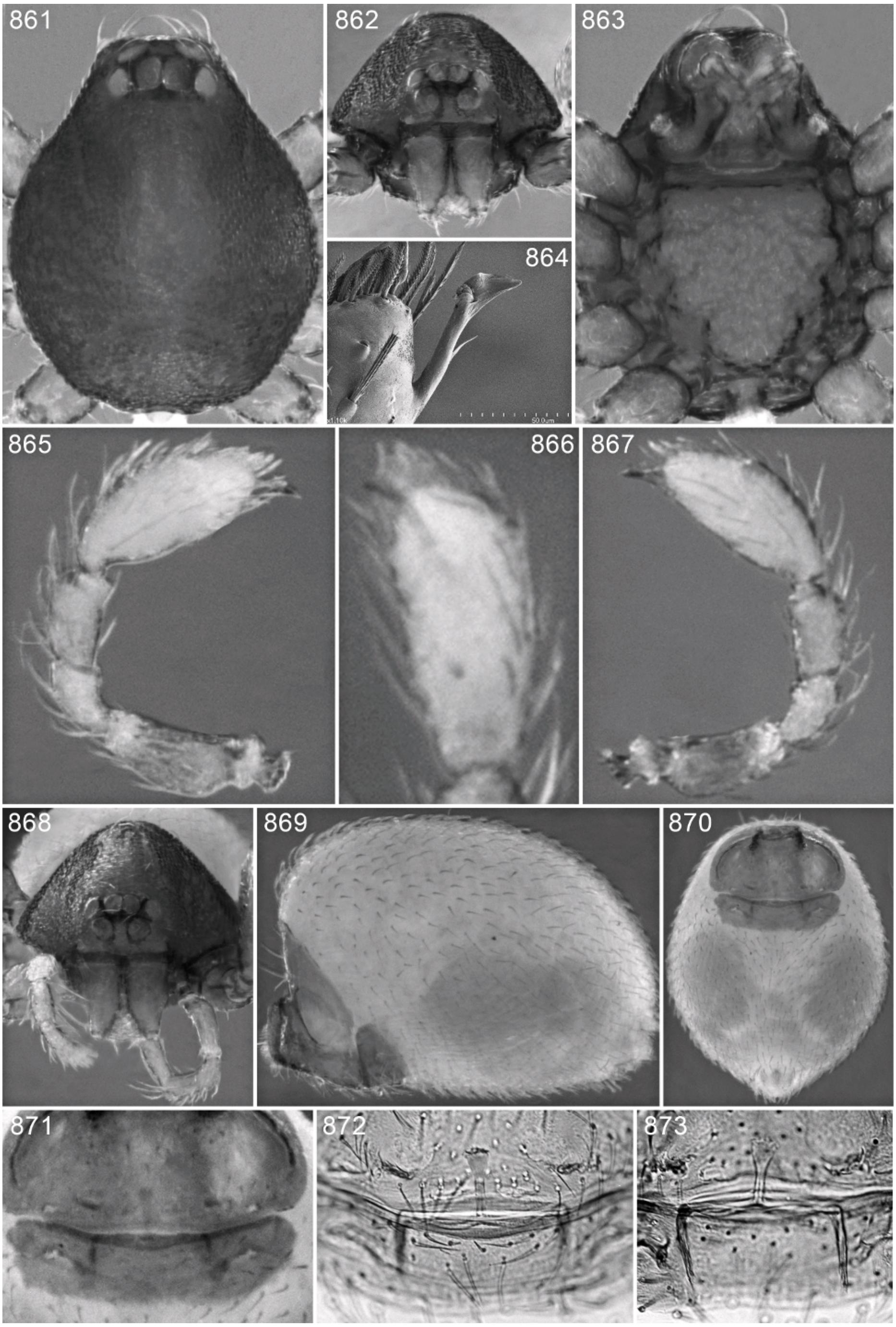
Figs. 853–860. *Semidysderina marta,* new species, female. **853.** Carapace, dorsal view. **854.** Sternum and mouthparts, ventral view. **855.** Abdomen, ventral view. **856.** Carapace, anterior view. **857.** Abdomen, lateral view. **858, 859.** Epigastric region, ventral view. **860.** Same, dorsal view.

Semidysderina mulleri, new species
Figures 874–886

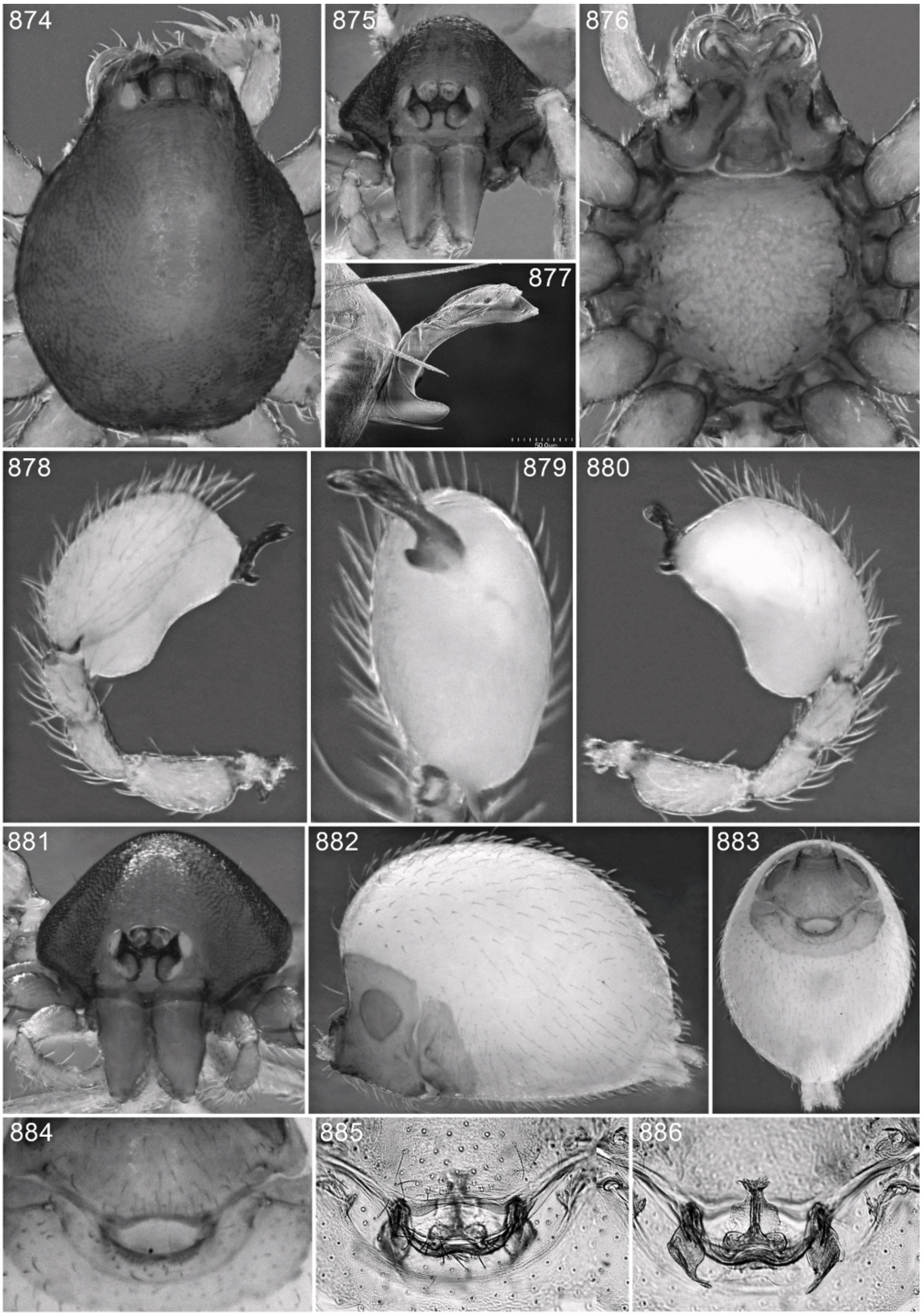
TYPE: Male holotype from moist litter taken at an elevation of 2000 m near San Lorenzo, northern Sierra Nevada de Santa Marta, Magdalena, Colombia (June 9, 1985; H.-G. Müller), deposited in MHNG (PBI_OON 15692).

ETYMOLOGY: The specific name is a patronym in honor of Hans-George Müller, collector of all the known specimens of this species.

DIAGNOSIS: Males can easily be recognized by the long embolus (figs. 877–880), females by the relatively long genitalic atrium bordered by a W-shaped anterior margin (figs. 884–886).



Figs. 861–873. *Semidysderina sturmi*, new species, male (861–867) and female (868–873). **861.** Carapace, dorsal view. **862, 868.** Same, anterior view. **863.** Sternum and mouthparts, ventral view. **864.** Left embolus, prolateral view. **865.** Left palp, prolateral view. **866.** Same, ventral view. **867.** Same, retrolateral view. **869.** Abdomen, lateral view. **870.** Same, ventral view. **871, 872.** Epigastric region, ventral view. **873.** Same, dorsal view.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Figs. 874–886. *Semidysderina mulleri*, new species, male (874–880) and female (881–886). **874.** Carapace, dorsal view. **875, 881.** Same, anterior view. **876.** Sternum and mouthparts, ventral view. **877.** Left embolus, prolateral view. **878.** Left palp, prolateral view. **879.** Same, ventral view. **880.** Same, retrolateral view. **882.** Abdomen, lateral view. **883.** Same, ventral view. **884, 885.** Epigastric region, ventral view. **886.** Same, dorsal view.

Male (PBI_OON 15692, figs. 874–880): Total length 2.05. Elevated portion of pars cephalica appears reticulate. Chilum small, triangular. Sternum surface finely reticulate. Anterior ledge of paturon with slight tubercle on inner margin. Endites with wide ventral process rounded distally, tip directed laterally. Leg spination: femur I p0-0-2, r0-1-1; tibiae: I v4-4-2, II v4-4-1p; metatarsi I, II v2-2-1p. Embolus relatively long, with large basal and small distal projections.

Female (PBI_OON 15603, figs. 881–886): Total length 2.43. Postepigastric scutum only around epigastric furrow. Leg spination: femora: I p0-0-2, r0-1-1; II p0-0-2, r0-1-0; tibiae I, II v4-4-2; metatarsi: I v2-2-2, II v2-2-1p. Atrium relatively long, anterior margin W-shaped, projecting over atrial plate.

Other Material Examined: **Colombia:** *Magdalena:* San Lorenzo, northern Sierra Nevada de Santa Marta, June 20, 1985, litter and moss, elev. 2200 m (H.-G. Müller, MHNG PBI_OON 15603), 8♂, 6♀; near San Lorenzo, northern Sierra Nevada de Santa Marta, June 9, 1985, litter, elev. 2000 m (H.-G. Müller, MHNG PBI_OON 15693), 1♂, Aug. 18–25, 1985, wet litter and moss, elev. 2200 m (H.-G. Müller, MHNG PBI_OON 15576), 2♂, 2♀, Aug. 22–24, 1985, bamboo forest with litter, elev. 2250 m (H.-G. Müller, MHNG PBI_OON 15425, 15605, 15687), 6♂, 6♀, Aug. 24, 1985, thorn forest with moist litter, elev. 2200 m (H.-G. Müller, MHNG PBI_OON 884), 2♂, Aug. 25, 1985, moss, elev. 1900 m (H.-G. Müller, MHNG PBI_OON 15705), 2♂.

Distribution: Known only from the Sierra Nevada de Santa Marta in northern Colombia.

Semidysderina sturmi, new species

Figures 861–873

Types: Male holotype and female allotype from montane forest litter taken at an elevation of 1600 m at Resinas, 1°55′N, 75°42′W, Huila, Colombia (June 8, 1956; H. Sturm), deposited in MCZ (PBI_OON 37005).

Etymology: The specific name is a patronym in honor of Helmut Sturm, collector of the types.

Diagnosis: Males have a small palpal bulb with a short, simple embolus (figs.14;864–867); females have only a slight, slitlike genital atrium, and a short, separate postepigastric scutum (figs. 871–873).

Male (PBI_OON 37005, figs. 861–867): Total length 1.26. Elevated portion of pars cephalica appears reticulate. Chilum small, wide, triangular. Sternum surface finely reticulate. Anterior ledge of paturon with slight tubercle at outer margin. Endites with ventral process relatively short, wide. Leg spination: femur I p0-0-2; tibiae: I v4-4-0, II v4-2-0; metatarsi: I v2-2-1p, II v2-2-0. Embolus long, narrow, distal two-thirds directed obliquely; cymbium completely fused with bulb, no seam visible.

Female (PBI_OON 37005, figs. 868–873): Total length 1.47. Postepigastric scutum only around epigastric furrow. Leg spination: femur I p0-0-2; tibiae: I v4-4-1p, II v4-4-0; metatarsi: I v2-2-1p, II v2-2-0. Atrium reduced to short, wide slit, both anterior and posterior margins rebordered; anterior genitalic process widened anteriorly; apodemes long, parallel.

Other Material Examined: Three females taken with the types (AMNH).

Distribution: Central Colombia (Huila).

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